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RELATING ADULT EDUCATION TO OTHER DISCIPLINES.

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REPRESENTATIVE CONCEPTS AND HIGHLIGHTS FROM RESEARCH LITERATURE WERE SUMMARIZED AND INTEGRATED DURING THIS PROJECT, INVOLVING (1) REVIEW AND INTEGRATION OF RECENT, RELEVANT RESEARCH IN ADULT EDUCATION, (2) REVIEW OF RECENT RESEARCH IN RELATED DISCIPLINES AND APPLIED FIELDS, (3) INTERVIEWS OF LEADING PERSONS IN THESE DISCIPLINES AND APPLIED FIELDS, (4) REVIEW OF THE WRITINGS OF PROFESSORS OF ADULT EDUCATION, AND (5) SYNTHESIS OF RECOMMENDATIONS EMERGING FROM A WORK CONFERENCE IN WHICH LEADING ADULT EDUCATORS APPRAISED AND CRITICIZED A PRELIMINARY REPORT OF NEEDED RESEARCH. THE STUDY (1) DEVELOPED A STRUCTURE WITHIN WHICH RESEARCH RELATED TO ADULT EDUCATION COULD BE IDENTIFIED AND (2) IDENTIFIED RESEARCH NEEDS OF THE FIELD IN RELATION TO THAT STRUCTURE. IT WAS FOUND SUBSTANTIAL RESEARCH CONTRIBUTIONS COULD BE OBTAINED FROM THE DISCIPLINES OF SOCIOLOGY AND PSYCHOLOGY. THE APPLIED FIELDS OF COMMUNICATIONS, HUMAN RELATIONSHIPS, AND SOCIAL WORK WERE FOUND TO HAVE IMPORTANT ROLES ALSO. NEEDED RESEARCH WAS IDENTIFIED IN THREE INTERRELATED CATEGORIES OF APPLICATION--(1) THE ADULT AS AN INDIVIDUAL AND A LEARNER, (2) THE ADULT RESPONSE TO SOCIOCULTURAL PHENOMENA, AND (3) THE ADULT EDUCATION ENTERPRISE. (JM)

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# RELATING ADULT EDUCATION TO OTHER DISCIPLINES

Cooperative Research Project E-012

by

**Burton W. Kreitlow**

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1964

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In human support, 34 persons of national reputation in their respective scholarly disciplines or fields of work gave from 30 minutes to three hours of their time to a discussion of the research needs of adult education and the contributions, potential or actual, of their own fields of study to resolution of these needs. In addition, 36 leading adult educators, after reviewing the initial draft of "Research Areas Needing Attention" --Chapter III of this report--met in Washington, D.C., for a three-day session of constructive criticism of the paper and to make plans for examining research within the framework outlined.

The documentary base for contributions to this study is a result of the loyal work of staff members and graduate students of the University of Wisconsin. Included in this group are:

Paul Butterfield - Project Assistant
Evan Clingman - Project Assistant
Ardyce Haring - Instructor, Agricultural Journalism
James Long - Project Assistant
Beatrice Loy - Secretary
Dean O'Brien - Assistant Professor, School Administration
William Portel-Foster - Project Assistant

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# FOREWORD

The developing pattern of social and technical change in the United States is exerting a great pressure on adults for retraining, continuous education, and new learning. This pressure, long predicted by those engaged in adult education, now calls for answers to questions not previously resolved by practice or research. The need for solutions to pressing problems about the education of adults is recognized and immediate.

The Commission of the Professors of Adult Education of the Adult Education Association has been concerned about the paucity of sound basic research, as well as the limitations of applied research completed to date. Efforts of its members in preparing the forthcoming volume, Adult Education: Outline of An Emerging Field of University Study, often were frustrated by lack of a research base to support the framework of the field.

The U. S. Office of Education has encouraged the undertaking of fundamental adult education research projects and the development of graduate programs.

The federal Extension Service in the U. S. Department of Agriculture, in cooperation with State colleges and universities, is engaged in serious explorations of both research and training in Extension Service educational programs.

The University of Wisconsin, one of 26 institutions with an advanced degree program in Cooperative Extension and one of 15 with a doctoral program in adult education, is engaged in a number of applied research projects developed as a means of resolving problems of the field level adult educator.

These four organizations have joined forces to make possible this study of the likely contributions of the research of selected disciplines to adult education, and to identify the research needs of adult education.

## CHAPTER I - THE RESEARCH PROJECT OBJECTIVES

### The Research Problem

What does research in adult education and related disciplines tell about the education of the adult? What research findings are related to this field of study? Where can completed research be located? Is it possible to develop some framework that will help to organize records of research that is completed or under way, or that should be undertaken as a means of developing a stronger base for and understanding of the field? These are the questions asked by those engaged as organizers and teachers in the field of adult education.

There are probably over 50 million adults in the United States who are striving to meet their educational needs through individual study or by participation in a multitudinous number of adult education programs. Each year their ranks are further swelled by an additional million adults who recognize that continued learning is a necessity in our culture. A current study by the National Opinion Research Center shows that over 17 million adults enrolled in some adult education course or activity during the period from June 1, 1961 to June 1, 1962. Almost 9 million more were engaged in some form of systematic self-education and 2,650,000 enrolled as full-time students.

The organized programs presently available to these continuing learners are products of social patterns far different from those of the 1960's. Too often program offerings are based on tradition, guess, or blithe assumption. They are rarely, if ever, based on scientific study. One of the major problems preventing informed decisions is the tremendous diversity of content, methods, and agencies involved in the activities generally labeled "adult education".

Participants may turn to the programs of voluntary agencies, community centers, the university extension services, or the public schools. In recent years, vast new educational programs have burgeoned in connection with labor unions, the armed forces, political agencies, professional groups, and industrial firms. Additional impetus has been added by the increasing amount of leisure time available to adults. Pressure for even more and different programs of adult education is resulting from activities of the Federal government, such as those conducted by the Agency for International Development, the Peace Corps, the Armed Forces, the Manpower Development and Training Act, and the recently initiated Poverty Program. In addition, projected educational programs are included in several bills now before the U. S. Congress.

These mounting pressures of modern society for more and better means of educating adults have focused attention on the limited research in this area. In general, reviews of research completed prior to 1960 serve to emphasize the scattered nature of the research and the fact that it lacks both depth and focus. However, a recognition of the potential contributions of such disciplines as psychology, sociology, and anthropology is developing. Applied areas, such as Cooperative Extension, industrial relations, social welfare, and executive training, are making additional contributions.

Nevertheless, recognition of the importance of the contributions from the related disciplines and applied fields is just beginning. To date, it has consisted chiefly of personal contacts rather than of any systematic examination and coordination of the research literature. A careful exploration of recent research in a number of disciplines would be of particular value in determining which fields are of primary importance, and it would aid in assessing the potential contributions of each.

Professional concern for adult education as a separate area in the field of education has been pioneered by a rather small cadre of persons in colleges and universities. There were 14 "Professors of Adult Education" who first met together in 1955. In 1956 the group included 24 persons representing 17 different colleges and universities.

In 1957 the "Commission of the Professors of Adult Education" of the Adult Education Association of the U.S.A. began a five-year series of seminar meetings with support from the Kellogg Foundation. Its purpose was to formulate a theoretical framework for adult education and a basis for the graduate level education of adult educators.

During this process the Professors invited representatives of other disciplines, such as psychology and sociology, to meet with them. However, the group found itself handicapped by the lack of research-based knowledge about educating adults. There were no sources readily available to them for drawing on the research findings in the various fields. Since the formulation of theory and the findings of research complement each other in the development of knowledge, the limited availability of research information was a barrier to progress.

It is clear from earlier explorations that there would be research findings of value to the adult educator in fields such as psychology, sociology, anthropology, vocational education, and communications. The present research development project is a limited exploration of the literature in these and related fields to sample the information existing in each which can be utilized in further developing and strengthening the theory and practice of adult education.

Earlier reviews of research in adult education can be used as guides in establishing the objectives and selecting the fields to be sampled in this study. Much of the research directly identified as adult education and completed prior to 1958 has been summarized and reported. Three major issues of the "Review of Educational Research"[1] have had this focus. Emphasized were education for later maturity, fundamental education for adults, basic characteristics of adults as related to education, content and methods of adult education, audio-visual aids of value in adult education, the sponsoring agencies of education for adults, philosophy and issues in the field, adult education as it relates to society, the psychology of adults, learning processes in the adult group, instructional methods, organization and administration of adult education, and program planning and development in the field. As chairman of the committee responsible for the 1959 issue of the "Review" the project director concluded that the evidence showed a dire need for extensive basic research.

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[1] "Review of Educational Research", Washington, D. C.: American Educational Research Association, A Department of NEA. Vols. XX, No. 3, June, 1950; XXIII, No. 3, June, 1953; and XXIV, No. 3, June, 1959.

Other significant research compilations include the Brunner publication,[2] Kreitlow,[3] Hendrickson,[4] Mezirow,[5] and Knox.[6] Research compilations in applied fields include the periodic reports of the Federal Extension Service[7] and the U. S. Office of Education report entitled, "Research in Industrial Education".[8] Each of these compilations provides a useful review of research relevant to the education of adults. No general structure of research completed or research need is identified.

Some problems that arise in a rapidly expanding field can be resolved by interpolating findings of studies from related areas. Other problems, though unsolved, can best be resolved by researchers in a related discipline or applied field. Yet other problems, such as those in an applied field like adult education, can only be resolved by those who have the concept of and feeling for "adult education" in their system.

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[2] des. Brunner, Edmund; David S. Wilder, Corinne Kirchner and John S. Newberry, Jr., An Overview of Adult Education Research. Chicago 11, Illinois, Adult Education Association of the U.S.A., 1959.

[3] Kreitlow, Burton W., "Research in Adult Education", Handbook of Adult Education in the United States (Edited by Malcolm S. Knowles) Chicago: Adult Education Association of the U.S.A., 1960.

[4] Hendrickson, Andrew, The Encyclopedia of Education Research. (Edited by Chester Harris ) Washington: American Educational Research Association, 1960.

[5] Mezirow, J. D. and Dorothea Berry, The Literature of Liberal Adult Education. New York: The Scarecrow Press, Inc., 1960.

[6] Knox, Alan, and Others, Adult Participation - Abstracts of Research on Participation of Adults. Lincoln: The University of Nebraska, 1961.

[7] Extension Research Developments, Washington, D. C.: Federal Extension Service. Division of Extension Research and Training, U. S. Department of Agriculture, 1950-1963.

[8] "Research in Industrial Education--Summaries of Studies, 1930-1955", Washington, D. C.: Office of Education, U. S. Department of Health, Education and Welfare, 1957.

What are the problems needing resolution? What are related disciplines and applied fields contributing to their solution? What contribution to needed research can they be expected to make in the future? What problems need adult educators themselves resolve? To answer these questions is no simple task; yet, it must be done.

Following his 1959 review of research in nonvocational adult education Brunner stated:

> "This report has concerned itself therefore with studies undertaken with diverse objectives by members of diverse disciplines. Some of these studies proved of value to adult education only as a by-product, not always foreseen in their designing. Consequently, there is no neatly definable universe that can be labeled adult education research. This is inevitable in a field as relatively young as adult education and as heterogeneous in its interests, programs, and practices."[9]

In reporting on research for the Handbook of Adult Education in 1960, Kreitlow referred to the field of adult education and the need for research as follows:

> "Finally, we must ask in a field as diverse as adult education, whether it is possible to build a cohesive body of research. Is it possible that the diversity of the field of adult education is such that the research must always be borrowed from another field, or at least have the bulk of it come from other disciplines? This may be true until such time as there is more clarity as to what adult education actually is...What this final outcome might be is only conjecture at this point. Is it a foundation in the disciplines of social science with an interpretation of their implications for adult education? Is it a concentration of research by adult educators with but small concern for research by adult educators with but small concern for research in the related fields? Is it a base in the fields of sociology, psychology, communication and political science with selective but critical descriptive,

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[9] des. Brunner, op. cit., p. 243.

> analytical, and experimental research in the "adult classroom"? Whatever it might be, within a reasonably short time research must be developed to gain the knowledge needed to improve adult education and adult learning..."
>
> "It is the judgment of this writer that we are fast approaching the period in adult education when we must organize and examine the parts. On the basis of this examination adult education will be a stronger professional area or it will be absorbed into the related professions."[10]

The research deficiencies that do exist in adult education can be attributed in part to these factors: Lack of coordination among the various sponsoring agencies, lack of knowledge of the research in the related disciplines, and lack of a sturcture of research need. First steps in removing these deficiencies are: The identification of promising sources of research in adult education and applied fields related to it, a careful scrutiny of the research results in such fields as sociology and psychology to determine their applicability to the problems of adult education, and the development of a working structure of research need against which to compare proposals for adult education research and to meld findings of research in adult education and related disciplines.

## Objectives of the Project

There are four major and interrelated objectives of this development project. They are:

1. To integrate findings reported in reviews of research in the area of adult education with the most recent findings.

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[10] Kreitlow, Burton W., "Research in Adult Education", Handbook of Adult Education in the United States. (Edited by Malcolm S. Knowles) Chicago: Adult Education Association of the U.S.A., 1960. p. 115.

2. To conduct selective reviews of recent research in the fields of psychology, sociology, anthropology, vocational education, and communications in order to identify findings which are pertinent to the process of educating adults, and to assess the feasibility of more extensive searches of the literature in these and other fields in terms of their probable contributions to adult education.
3. To integrate the "adult education" literature with relevent material from other fields and to categorize this literature in terms of the basic problems in adult education.
4. To relate the integrated research literature from the various disciplines to the existing theory in the area of adult education, and specifically to that representing the work of the Commission of the Professors of Adult Education developed during the past five years and to be published in 1964 as a book titled, Adult Education: Outline of an Emerging Field of University Study.

It is the purpose of this development project to explore each of the above objectives for promising outcomes. When such appear they will be pursued until a tentative judgment on their worth can be made. Documentation will be made of promising areas of research, but no attempt to document all sources is anticipated. Findings related to the four objectives will be integrated into a structure designed to demonstrate the areas of research need in adult education.

## CHAPTER II - PROJECT PROCEDURES

The nature of adult education makes it possible to approach this study in a number of ways. In meeting the study objectives it was important to observe the field from several different points of view. Thus, an exploration of the recent literature in each of a number of disciplines was made, the applied fields considered to be closely aligned were reviewed, and the literature pertaining directly to adult education was studied.

The objectives of the study did not call for discreet summaries of all that is available from each field, but they did have a concern for the ways in which completed research from these fields could be integrated for useful attacks on basic problems in adult education. Judgments had to be made as to the potential of the literature in disciplines and applied fields to contribute solutions to these problems.

This initial exploration of the recent literature is in the nature of a pilot study to determine promising sources of completed research. As in other developmental and exploratory investigations, judgment of the project staff determined the directions to explore, the depth to pursue each lead, the relationships among fields, and the promise of each field to aid adult education.

### Selection of Fields

The basic decision on fields to pursue was made on the basis of past study of and developments in adult education. In addition, changes taking place in American life were related to adult education in such a way that the potential contributions to it from each field of study could be identified. As a starter, recent studies within adult education were reviewed and questioned in terms of the fields in which each study was anchored.

A practical consideration in this research, as in any wherein only limited exploration is possible, is to match the competences of the research staff with the fields in which their competences can be most effectively utilized. Because of the composition of the staff assembled for this study, assignments on this basis were possible in most instances.

Selection of Sources

Systematic review of selected documents required a judgment as to which journals and other sources of research reports would be most fruitful. This judgment was made on the basis of discussions with colleagues in adult education and with professionals in related disciplines and applied fields.

In a field such as psychology, the many available journals made a complete review of all issues for even one year impractical. The decision was made that Psychological Abstracts would be the key source and, if a pattern appeared that identified one or another of the many journals in psychology as being most directly tied to adult education, it would be included among the sources reviewed.

The initial exploration with adult education colleagues and those in other disciplines required a decision as to whether or not the prime concern in the search should be basic or applied research. Adult education is an applied field, so the key concern became applied research. However, let it be made clear that research, basic in nature but also having a theoretical tie to the field, has been given consideration.

The criterion emphasizing applied research gives a bias to judgments as to the potential of certain fields to contribute to adult education. For example, the research in vocational education almost certainly emphasizes practical application, while that in psychology tends to be basic in orientation. This is not to say that one is any less important than the other, only that, for purposes of this study, the applied is given greater emphasis.

Review of the Literature

A systematic review of the literature was made in two stages. First, the director and his assistants made a broad exploration of the research in sociology, psychology, anthropology, economics, business and industry, communications, social work, vocational education, and adult education. Next, the staff held a series of meetings to establish an outline from the base of promising literature thus identified. This outline was used as the framework for a further more intensive search in the above and other fields.

The second stage was one of directed search in the recent literature for material relevent to the established framework. It is in this second stage that the materials from the related fields and disciplines were brought into focus.

The design of the study was such that, between the first and second stages of the literature review, certain modifying decisions could be made. Interviews with leading professionals were begun at this time. The materials already gathered were used to develop the base for the questions to be asked during the interviews, and the suggested list of critical adult education problems to which the interviewees were to respond.

Interviews with Authorities

Selected persons of national stature in some discipline related to adult education or in an applied field were interviewed. Using as a base the problems of the field as identified in the literature, these professionals aided in the clarification of the fields most likely to contribute to the development of adult education through research contributions. They also identified what they believed to be the major problems of adult education. These problems, in turn, were examined in conjunction with the ones identified as the review of literature continued.

The interviewees responded to a check sheet of problems identified by adult educators and those in related disciplines as being critical to fullest development of the field. As expected, persons from different fields of study reacted differently to these problems. Their reactions to specific problems leads were integrated into their total response rather than summarized and reported as discreet items. A narrative was written following each interview, but these will not be taken up separately in this report. Rather, they were used as one source of information in preparing the framework of needed research that will be discussed in Chapter III.

## Comparison with the AEA Document

The professors of adult education have in press a book reviewing the field of adult education. Following the summary of the related literature and consideration of the interviews with the national authorities, the manuscript of the book, Adult Education: Outline of an Emerging Field of University Study, was carefully reviewed. Particular concern was given to identifying possible omissions from the literature review or missed problem areas for consideration in the literature review and the interviews with authorities.

## Report to Professors

A preliminary draft of the document on this portion of the investigation was written prior to the final report. This portion was presented as a working paper to an invitational conference of professors of adult education and nationally recognized adult educators. During the three-day conference they reviewed, criticized and crystalized details for the final draft in a manner only specialists qualified as they were could do. This document, as revised, will be closely allied to Part C of Chapter III, Research Areas Needing Attention.

## The Final Report

This report is an integration of materials from many sources. No attempt has been made to list completely all of the references reviewed or even all of those abstracted by the director and his project assistants. The report is an attempt at subjective integration of the literature, the results of interviews, the book being produced by the professors of adult education, and the comments and criticisms coming from specialists in adult education during three days of work on the initial draft of the section on needed research.

Although the emphasis in this document is on research needs, samples of concepts related to adult education from psychology, sociology and several applied fields will be listed, along with relevant literature.

The framework of research need, to be developed in Part C of Chapter III, has evolved from an integration of the resources available to the project staff. It can be used as a benchmark against which research underway can be compared and from which research to be undertaken can stem.

# CHAPTER III - FINDINGS

Materials from a variety of disciplines and applied fields contribute to adult education. Much has been contributed by interpolations from related theory and a great deal has been contributed out of experience. However, during the period when adult education is "finding itself", the contributions from research as relatively limited.

Many of the studies reviewed in search of contributions do not meet the criterion of research in a strict sense, but some of them are useful, nevertheless. A classification system into which to fit the contributions thus identified was developed at the midpoint of the study. It consists of these eight major categories:

I. Adult Education
II. Business and Industry
III, Communications
IV. Psychology
V. Sociology
VI. Social Work
VII. Vocational Education
VIII. Education

Within this system it is possible to categorize a majority of the contributions from the literature. A more detailed classification, expanding the eight headings, can be found in Appendix B.

This system proved useful as a first step in organizing the research needs of the fields, but it is too extensive and clumsy to be used as a practical guide. Because of this, a more limited, but clearer, system of organization was developed for identifying the contributing fields, sampling the related concepts and developing a structure around which to picture the research needs of adult education. Part Three of this chapter is built around this latter structure, and it is referred to from time to time in Parts One and Two.

The Classification structure contains the following categories and is pictured in Figure 1, page 50a.

I. The Adult as an Individual and a Learner
II. The Adult's Response to Social Cultural Phenomena
III. The Adult Education Enterprise

# PART ONE

## Disciplines and Fields of Study That Have Contributed to the Theory and Practice of Adult Education

Researchers in several disciplines have contributed basic research studies that tie directly to the process of educating adults. In these instances the application is clear. In other investigations, hypotheses are tested and theories are developed that cover the ground in which the adult educator has an interest but, at this point in development, no direct tie can be identified. To date, the major contributions to the field of adult education have been coming from sociology and psychology. From these fields have come studies that have both theoretical and practical application.

The major practical applications to adult education come from the fields of communication, business and industry and vocational education, plus the research conducted by the adult educators themselves. The generalized field of education, which is all too often considered to be elementary, secondary and higher education only, is a most fertile field for research that, with verification at the adult level, is likely to be most productive.

### Basic Contributions of Sociology and Psychology

Adult education has many of its roots in sociological and psychological foundations, and the expectation that research in these fields would be the source of substantial contributions has been verified. The review made for this investigation clearly identifies the sociologists as having had more direct concern with problems od adult education than have the psychologists. Some of the major contributions to the field have been and are being made by rural sociologists who have used as justification for their research projects the social problems related to innovation, adoption of recommended practices and resistance to change.

The setting for identifying these problems came from the working relationships established between adult educators in the Cooperative Extension Service of the Land Grant Colleges and the sociologists. It forces one to wonder whether or not more research on the psychological background of adult education might have occurred if the Land Grant Colleges had employed rural psychologists as well as rural sociologists.

The literature of the 1959-1963 period shows that psychologists are developing an increasing awareness of problems of learning related to adults. This is noted in the research and writings of adult educators whose discipline is psychology and in the work of psychologists engaged in learning studies.

An increase is noted, also, in the kinds of studies that deal with a combination of socio-cultural and psychological phenomena. The contributions of the social psychologists to the theory and structure of adult education are some of the most useful for practical settings. Studies of learning, social interaction and other small group phenomena are reported in a variety of sophisticated professional journals.

Those sociologists and psychologists interviewed suggested a variety of research contributions that their disciplines make to adult education. In general, persons from both disciplines recognize the great potential contributions that research in their respective fields can make to needed developments in adult education.

## Potential Contributions of Anthropology, Economics, Political Science and Other Disciplines

Adult education undoubtedly can gain breadth from investigations in fields other than those that provide its tap roots. Such disciplines as anthropology, economics and political science make some contributions, but by no means in an amount equal to their potential.

It is anticipated, after reviewing the limited pertinent documentation in these fields, that they have only begun to recognize the changes in educational patterns that are developing in mid-twentieth century. Anthropologists, such as Margaret Mead and George Spindler, and the economists, Fritz Machlup and Theodore Schultz, are pushing back the horizons in their disciplines in such a way that the problems of adult educators are being recognized as worthy of investigation. Thus far, adult educators who have backgrounds in these related disciplines appear to have been too busy with action phases of programs to employ research know-how from their basic disciplines in dealing with their adult education problems.

There are contributions to be made by these fields that should not be overlooked just because present research related to programs of adult education is limited.

## Contributions of Education

There is both a dilemma and an opportunity arising from the relationship between adult education and general education. The dilemma appears because of the inability to view education as a continuous process. This is noted in the research undertaken in and its interpretation within elementary and secondary school and college settings. The opportunity to contribute to adult education comes from these same researchers who have learned much about working with and analyzing educational phenomena. The basic research in education is as meaningful for the adult educator as for the kindergarten teacher. The applied research, in spite of the bulk of it being accomplished in settings with captive audiences, does provide the adult educator with many promising ideas and bases for conslusions, if he will but search them out.

This somewhat limited review of the research in both general and adult education suggests that the dilemma has made for some separation between them that has impeded positive contributions of one field to the other. However, there is some evidence that traffic between the two is beginning to flow as the impact of the increased status of education in American society makes its way into classroom and shop. Some of the research in adult education is established on a base built by general education. There is an awakening at all levels of education to the wisdom of a more direct treatment of the characteristics of the individual as a learner and his response to social-cultural phenomena at all stages of life.

A vast reservoir of knowledge is being built up as a result of research in elementary, secondary, and higher education that is yet to be tapped by the adult educator. There is research completed and underway in various aspects of adult education that is not integrated in any organized way with the total field of adult education itself. The investigations in vocational education for adults, in the effectiveness of special programs in business and industry, in the learning studies in the military--which often do not cross service lines, much less reach the university adult educator--rarely come together in any reasonable organization by means of summary documents or coordinated reviews of research.

Adult education is a part of all of this. To meet its developing challenge it is engaged in the struggle to identify its position in the field without cutting off the resources that should be part of it. Among the resources and researchers with many like concerns that need to be brought into this relationship are these examples: The American Society of Training Directors, the Office of Naval Research, the Psychological Branch of the Aero Medical Laboratory, the Personnel Research Branch of the Office of the Adjutant General and the American Institute for Research.

## Contributions of Other Applied Fields

The field of communications has a logical affinity to adult education. Educators, and adult educators in particular, habitually make use of communications media as they go about their work. They have a message; they are themselves communicators; and they have an audience which is the focal point of their efforts at educational programing.

Although the affinity between adult education and communications is clear from the theoretical approach, the review of research literature in both fields identified very little traffic between the two. Certainly in the problems of "mass culture", and the sociology of knowledge in relation to that culture, the areas of inquiry of the two fields merge. The literature of each field is closer to the other in speculative and subjective documents than in research.

Communications research is a promising field for the adult educator to examine, even if the bulk of the literature in each is not written with such a tie in mind.

The research in social work showed little to contribute to adult education in general, but it has much to offer those developing educational programs with the disadvantaged. It is likely that this limited contribution is a result of the adult educator's limited success with other than middle class adults. If this is the case, then the potential contribution of research in social work will increase as concerns of educators turn to problems of the less well fed, the inadequately housed and the ill clothed.

Research in school administration rarely considers the adult program of the school. However, recent studies of role theory and the research developments on differing theories of administration make a contribution to that portion of adult education which is public school oriented. The research done at the National Agricultural Extension Center for Advanced Study makes use of these school administration studies in developing administrative theory for an agency devoted almost exclusively to adult education.

The limited review of the research in library science, with particular reference to adult service, identified some concepts and ideas useful to the adult educator. Human resources to pursue this area in greater depth were not available to the project director, so no final generalization on the worth of library research can be made, other than to suggest that it is promising.

Numerous contributions to adult education were identified in the research literature of the disciplines and applied fields examined in this developmental study. Obviously there are other disciplines and fields, not examined on this occasion, which undoubtedly are in a position to make other kinds of contributions. For instance, the fact that research in home economics, history and philosophy was not pursued during this investigation should not blind one to contributions each may now be making or may make in the future.

## PART TWO

## Selected Concepts and Research Areas Related to Adult Education

No attempt has been made in this part of the report to identify and describe all or even a major portion of the concepts and research areas in sociology, psychology or any of the applied fields of study that have application to adult education. Sociology and psychology have been selected for use as examples because of their signal importance to development of the field. The concepts and areas of research cited from these fields are to be considered promising examples for the researcher to consider and not necessarily the strongest contributions from the fields.

The disciplines and concepts have been chosen in relation to the stance regarding application that has been adopted for this development project. It is not unlikely that such fields as philosophy and history eventually will have as much or more to offer the adult educator than has been noted in this survey of the disciplines more closely allied with the practice of adult education. In any event, it rests primarily with the builders of graduate curricula in adult education to determine which concepts and research areas are to be emphasized in this emerging field of study.

For each concept or research area chosen for consideration, selected examples of completed research areas will be identified. In some instances, entire books could be or have been written; in other, the present status of knowledge is in its infancy. Further, more intensive examinations of these latter specialized areas will be left to others.

## Relevant Concepts and Research Areas from Sociology

Innovation diffusion and adoption. This is an area of research that has received extensive investigation during the past two decades. Brunner[1] suggests that findings in this area have application to both vocational and nonvocational adult education. Fliegel,[2] in studying adoption rates among dairy farmers, grapples directly with a problem of adult education by suggesting that radical departures from traditional practices require more intensive and effective educational programs if the dairyman is to make valid judgments.

Rural sociologists have found this such a productive field for research on just the agricultural aspects of adoption that books are appearing on this topic alone. Lionberger,[3] after reporting on the most significant studies on agricultural practices adoption, suggests that this area needs to be examined on an interdisciplinary plane, specifically pointing out needed teamwork among sociologists, economists, social psychologists and anthropologists.

Rogers[4] lists 52 generalizations that he believes are justified on the basis of diffusion and innovation studies. His book contains a 600-item bibliography.

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[1] Brunner, Edmund; David S. Wilder, Corinne Kirchner and John S. Newberry, Jr., An Overview of Adult Education Research. Chicago 11, Illinois, Adult Education Association of the U.S.A., 1959.

[2] Fliegel, Frederick C., "Farm Practice and Adoption Rates". Social Forces. Vol. 40, No. 4: 364-370; 1962.

[3] Lionberger, Herbert F., Adoption of New Ideas and Practices. Iowa State University Press, 115 P.; 1961.

[4] Rogers, Everett M., Diffusion and Innovations. Free Press of Glencoe, 373 P., 1962.

Katz,[5] in a classic review of diffusion and innovation, points out the limitations of this kind of research when it is conducted virtually in vacuum by workers in anthropology, sociology, education or communications. He suggests a variety of more desirable approaches to innovation studies.

Research on diffusion, innovation and adoption has progressed sufficiently so that new means of computer simulation would be appropriate to use in further development. Prediction of change through simulation would demand greater clarity in structuring and standardizing methods and procedures than has been used thus far. Such standardization would have the added advantage of contributing to comparability of results among the many future studies likely to be conducted in this key research area.

Disengagement. The adult educator's approach to the older adult had an early focus on post retirement, use of leisure and preparation for retirement. The early research also focused on a rather narrow band of time just prior to and following the act of retirement. Even as late as the 1959 Brunner report,[6] no research was identified that has as its theoretical base the social-cultural approach to disengagement, a process of considerably wider scope.

Disengagement--the process by which roles in relation to job, family and community change after middle age--is suggested by research on aging but has not been developed into a usable frame of reference. Birren[7] presents an excellent section on changing social-cultural factors of the aging individual in his summary of the literature on psychological and biological aspects of aging, but an approach to the last half of the life span in terms of a theory of disengagement is left for Cumming and others[8] and Cumming and Henry[9]. In the 1961 report they have data on the process in terms of a five-year study with adults from age 50 through 90.

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[5] Katz, Elihu and Others, "Research in the Diffusion of Innovation." American Sociological Review. Vol. 28, No. 2: April 1963.

[6] Brunner, Edmund des.; David S. Wilder, Corinne Kirchner and John S. Newberry, Jr., An Overview of Adult Education Research. Chicago 11, Illinois, Adult Education Association of the U.S.A., 1959.

[7] Birren, James E., Handbook of Aging and the Individual. Chicago: University of Chicago Press, 1959.

Whereas innovation and diffusion have been researched extensively, disengagement represents a new but promising field of investigation. It is now sufficiently defined to encourage added research. Havighurst[10] and Havighurst, Neugarten and Tobin[11] have aided in its description and, by asking critical questions in relation to the concept, have opened the doors to a series of new approaches for examining the process.

Social class and verbal behavior. The use of language long has been associated with the kind of cultural background in which a person is reared. Pieris[12] indicates that it can function either to unify a group or reflect its conflict. The educator working with adults often is faced with the task of bridging the verbal behavior gap between cultural groups if he wishes to maintain their members as volunteers in educational programs.

The adult educator's research concern with social class stems in part from the long recognized difficulties of maintaining any kind of an educational program with members of the lower strata of class profiles.[13,14] This, in combination with his difficulty in achieving any noticeable degree of communication between himself and the lower classes, has led to a research concern for the two factors in relation to each other.

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[8] Cumming, Elaine, and others, "Disengagement: A tentative Theory of Aging". Sociometry. Vol. 23: 23-25; 1960.

[9] Cumming, Elaine and Henry, William E., Growing Old, The Process Of Disengagement. New York: Basic Books, 1961.

[10] Havighurst, Robert J., "Changing Status and Roles During the Adult Life Cycle". Mimeographed document, University of Chicago, 25 P.; 1963. (To be published by CSLEA in 1964).

[11] Havighurst, Robert J., Neugarten, Bernice L., and Tobin, Sheldon S., "Disengagement and Patterns of Aging". Mimeographed paper read at the International Congress of Gerontology, Copenhagen, 1963.

[12] Pieris, Ralph, "Speech and Society: A sociological Approach to Language". American Sociological Review. Vol. 16, 499-505; 1951.

Social class and verbal behavior, in combination, is not a recent concern. Benjamin Franklin placed a very high utilitarian value on the correct use of language in an era when it was not being stressed in the schools. In his academy he advocated training in proper English and less emphasis on Latin and Greek because he believed that "education of a gentleman in his own tongue" was essential to differentiate him from those of lower breeding.[15]

Research on relating class to verbal behavior has been conducted extensively with children and to a much more limited degree with adults. The influence of social class upon learning verbal behavior in general and learning in particular is now well documented. Davis[16] writes that this relationship is "the pivotal meaning of social classes" which defines and systematizes different learning environments for children in

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[13] Devereus, Edward C., "Community Participation and Leadership". Journal of Social Issues, Vol. 12, No. 4, 29-45; 1960.

[14] Knox, Alan B., "Adult Education and the Adult Life Cycle". Adult Education. Vol. 13; Spring 1963.

[15] Lemisch, Jessie L., Editor, Benjamin Franklin. The Autobiography and Other Writings. New York, New American Library, 1961.

[16] Davis, Allison, Social Class Influences Upon Learning. Harvard University Press, 1962.

different classes. On the basis of this relationship, Davis criticizes the highly verbal aspects of I.Q. tests that are given to school children. Conant[17] takes a different, but related, point of view by suggesting that the tests are all right but the social conditions of the lower classes need to be improved.

Bernstein[18] suggests that lower class children assimilate a need for direct and immediate satisfaction while middle and upper class children develop a sense for long-term goals. Lewis,[19] in writing of the same concept, emphasizes differences of interpretation that occur among lower class families where a child learns to interpret properly within his family group, even if the language is incorrect. It is when he leaves the family and faces the unfamiliar that language fails him. The adult educator recognizes these same kinds of reactions at later stages in the life cycle. He makes references to participation or lack of it in describing what he considers to be successful or unsuccessful programs.

Some of the studies adult educators are making examine reasons for dropping out of adult programs. Assembling basic data on the relation of participation to selected social-cultural phenomena is an important first step in such studies. This is characteristic of the Johnstone[20] study. He offers social clues as to why certain groups never volunteer to participate in the first place.

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[17] Conant, James B., Slums and Suburbs. McGraw-Hill Book Co., Inc., New York, 1961.

[18] Bernstein, Basil, "A Public Language: Some Sociological Implications of a Linguistic Form". British Journal of Sociology. Vol. X; 311-326; 1959.

[19] Lewis, M. M., Language in Society. New York: Social Sciences Publishers, 1948.

[20] Johnstone, John W. C., Volunteers For Learning. Report No. 89, Chicago: National Opinion Research Center, University of Chicago, February, 1963.

Socialization throughout the life cycle. Socialization of the individual in a society has received the attention of social researchers and psychologists for a long time. However, it is only in the current decade that attention of note has been given to this concept in studies of the mature and later years. In November, 1963 the Social Science Research Council, with aid from the National Institute of Mental Health, sponsored a conference that provides some base lines for future research. A report containing the major research reports and theoretical formulations coming from this conference will be available from NIMH.[21]

Brim[22] identified changes in socialization content throughout the life cycle. Each of the six probable changes he identified within his frame of reference is amenable to social research. These changes are interpretations suggested by previous studies and, with verification, would appear to be applicable to the setting in which the adult educator functions.

Other concepts. The sociology of leisure, in a society with changing value norms in relation to both work and leisure, is of importance to the adult educator. Research here is extensive, but it has had only limited effect on programs of education for adults. In this area it appears, from the review of the literature, that the action oriented educator is moving ahead of the researcher to establish programs on a basis of gross generalizations about leisure time. Dumozedier[23] suggests a variety of ways of approaching the study of leisure, some of which have a direct bearing on adult education and personality development.

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[21] When published copies may be obtained from the National Institute of Mental Health.

[22] Brim, Orville G. Jr., Socialization Through the Life Cycle. Mimeographed document, Russell Sage Foundation. November, 1963 63 P. (To be in a report of conference on Socialization Through the Life Cycle published by the Social Science Research Council).

In addition to the relationship of social class to verbal behavior, there are relationships between class and other factors that are, or can be, tied directly to learning programs for adults. Of direct application is the research underway on the ties between social class and voluntary activities, best represented by Slater,[24] who demonstrated that upper socio-economic class women resolved choices between activities and housework in favor of activities. Those women whose status was rated lower saw themselves almost exculsively in a domestic role. Litt,[25] based on his study of high school students in different socio-economic strata communities (upper middle class vs. working class), indicates that the orientation of the schools to community activities prepares the way for the findings noted about adults.

Kohn,[26] reporting on the relationship between social class and parental values, suggests that value concepts have different meanings for parents in different cultural settings and social positions. His need to understand different value patterns among participants and nonparticipants in voluntary education programs has brought the adult educator into the area of this kind of social research.

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[23] Dumozedier, Jaffre, "Current Problems of the Sociology of Leisure", International Social Science Journal. Vol. 12, No. 4; 522-531 P.,

[24] Slater, Carol, "Class Differences in Definition of Role of Membership of Voluntary Associations Among Urban Married Women". American Journal of Sociology. Vol. 65; 616-665; 1960.

[25] Litt, Edgar, "Civic Education. Community Norms, and Political Indoctrination". American Sociological Review. February 1963.

[26] Kohn, Melvin, "Social Class and Parental Values". American Journal of Sociology. Vol. 64, No. 4: 1959.

Leggett's[27] studies of working class consciousness have particular relevance to adult educators trying to program for rather migrant populations.

## Relevant Concepts and Research Areas from Psychology

Learning to learn. Out of the basic research on learning have evolved a body of knowledge and sufficient theory to lead the application-minded adult educator to accept the notion that one can learn. If this ability has not been acquired by adulthood, it can be taught then. This concept has its base in Gestalt psychology and field theory where there is foundation research on the way the thinking process is organized.[28,29,30]

The studies of cognition by Bruner[31,32] and the theoretical framework surrounding the concept are of concern to those working with the adult. If the adult's cognitive development is understood, then both organization and presentation of learning materials can be adjusted for maximum outcome. Though likely to be more complex, in relation to teaching adults than to teaching children, research on cognitive variables has much to offer the field.

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[27] Leggett, John C., "Uprootedness and Working Class Consciousness". American Journal of Sociology. Vol. 58, No. 6; 682-692, May 1963.

[28] Hilgard, Ernest R., Theories of Learning. Chicago: Appleton-Century Crofts, Inc., 1959.

[29] Katona, George, Organization and Memorizing. New York, Columbia University Press, 1940.

[30] Lewin, Kurt, Field Theory in Social Science, New York, Harper and Brothers, Inc., 1951.

[31] Bruner, Jerome S., "Course of Cognitive Growth", American Psychology, Vol. 19, No. 1, 1-15, January 1964.

[32] Bruner, Jerome S., The Precess of Education, Cambridge, Mass.: Harvard University Press, 1960.

Hebb,[33] dealing with the organization of behavior, emphasizes the dependence upon "well organized sequences" in new learning situations, as well as interaction with some past pattern of organization.

The study of aging, often without special concern for contributions to the field of learning, has produced useful clues for educators. Birren's[34] efforts in this regard are noteworthy, as are the studies of both young and older adults by Welford[35] and Botwenich and associates.[36] Welford's work on changes in performance from young adulthood, both in the laboratory and in the field, forms the base for considerably more exploration in relation to perception, problem solving and learning, and memory.

No longer is the capacity of adults to learn questioned seriously. The follow-up studies of the Iowa Army Alpha Test subjects by Owens and Charles,[37] when the subjects had reached age 61, indicate significant learning decline only in the numerical component between ages 50 and 61. No changes in magnitude on other individual or trait differences were noted.

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[33] Hebb, Donald O., The Organization of Behavior. New York: John Wiley and sons, Inc.; 1949.

[34] Birren, James E. and others, A Study of Human Aging: Biological and Psychological Aspects. Chicago: University of Chicago Press, 1962.

[35] Welford, Alan T., Aging and Human Skill. Oxford University Press, 1958.

[36] Botwenich, Jack, Brinley, Joseph F., and Birren, James, "Maintaining Set in Relation to Age". Journal of Gerontology, Vol. 12; 300-305, 1957.

[37] Owens, William A. and Charles, Don C., Life History Correlates of Age Changes in Mental Abilities. Layfayette, Purdue University, 1963.

One of the promising explorations of the "learning to learn" concept is now being directed by Professor Boyd in the University of Wisconsin Adult Learning Laboratory. Studies establishing the framework for experimentation on the validity of the concept have been made[38,39] and the experiments are under way. Much of the background for developing the concept came from the literature on human learning; particularly useful were interpretations of the problems of transfer by McGeoch and Irion.[40]

Individual change a continuous process. Even the casual observer can recognize gross physical, psychological, emotional and personality changes that occur as man progresses through his life span. The nuances of such changes in characteristics of individuals from year to year and through progressive decades of the life span are of concern to the psychologist. How the adult adapts to his own changes and to changes in others are of concern to the adult educator.

Summaries of research on this concept are available. Pressey and Kuhlen[41] provide a valuable documentation that covers research completed prior to 1957. The psychological base for continuous development of man

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[38] Prosdocimi, Ludmilla, A Conceptual Framework for the Observation and Study of Individual and Group Behavior in Adult Instructional Groups. Masters' Seminar report. Madison: University of Wisconsin 1962.

[39] Portal-Foster, Charles W., A Methodology for the Study of Work and Emotionality in Small Face-To-Face Instructional Groups. Masters' Seminar report. Madison: University of Wisconsin, 1963.

[40] McGeoch, J. A. and Irion, A. L., The Psychology of Human Learning. New York: Longmans, Green, Inc., 1952.

[41] Pressey, S. L. and Kuhlen, Raymond, Psychological Development Through the Life Span. New York, Harper and Brothers, 1957.

is well developed by Erikson.[42] Havighurst and Orr[43] and Havighurst[44] focus on the older years but point out the need for studies to reflect the total spectrum of developmental changes from young adulthood to old age.

Reviews on special aspects of individual change also are being completed. For example, Wohlmill[45] reports on numerous studies which refer to age changes in visual perception. Here the noted trends deal with such factors as increase in assimilation, decrease in awareness of contrast and increase in errors of judgment of verticality with age. This type of review, and the research it reports, appears not to have any immediate application for the adult educator, other than to verify his judgment that individuals change in a great variety of ways.

Aging in today's culture presents the researcher with many specific social-psychological problems. The increase in life expectancy, the decrease in work time accompanied by increase in leisure, and the recognition of "boredom" as a psycho-social disease are being examined in terms of what they do to an individual's pattern of change in later years.[46,47] It is suggested by Breen[48] that researchers in general do not know the nature of aging and the research thus far completed on individual change in the later years is inadequate. He suggests special attention should be devoted to the average normal adult in a variety of group settings, such as institutions, retirement areas, communities, socioeconomic clusters, stress groups, racial groups, etc.

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[42] Erikson, Erik H., Childhood and Society, New York, W. W. Norton and Co., 1950.

[43] Havighurst, Robert J. and Orr, Betty, Adult Education and Adult Needs. Chicago: CSLEA, 1956.

[44] Havighurst, Robert J., "Successful Aging", Gerontologist. Vol. 1, 8-13; 1961.

[45] Wohlmill, J. F., "Developmental Studies of Perception", Psychological Bulletin. Vol. 57; 249-288; 1960.

The nature of the growth response of adults having different levels of social and psychological motivation is not well known. That they do respond is well documented. The literature suggests that differences in environment may be more influential motivators of changes in adults than such factors as age and sex.[49,50,51,52]

The effects of occupation and work role on psychological adjustment

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[46] Still, Joseph M., "Boredom, The Psycho-social Disease of Aging", Gereatrics. Vol. 12; 557-560; 1957.

[47] Sheldon, Henry D., The Older Population of the United States. New York: John Wiley, 1958.

[48] Breen, Leonard Z., "Some Problems of Research in the Field of Aging", Social Sciences Research. Vol. 41; 412-416; 1957.

[49] Phillips, B. S., "Role Change, Subjective Age, and Adjustments: A Correlational Analysis". Journal of Gerontology. Vol. 16; 247-352; 1961.

[50] Neugarten, Bernice L. and Gutman, David L., "Age-Sex Roles and Personality in Middle Age: A Thematic Apperception Study". Psychology Monographs. Vol. 72; 33 P; 1958.

[51] Houle, Cyril O., The Inquiring Mind, Madison: University of Wisconsin Press, 1961.

[52] Hass, Rita, "Finding Useful Roles for the Aging". Journal of Social Therapy. Vol. 3; 141-146; 1947.

were explored by Corey[53] and McFarland and O'Doherty,[54] who indicate that no sure methods for training the aging-worker population have as yet been developed.

There are few empirical studies that can be used to guide adult educators in the understanding of and adjustment to changes in personality that occur in adulthood. Neugarten,[55] after summarizing both longitudinal and cross sectional studies of personality phenomena, concludes that the studies support the position that changes do occur and they are orderly and developmental in nature; their direction tends to shift from active to passive mode and from outer-world to inner-world orientation; and realignment of ego processes surrounding them begins during the middle years.

Studies by Erickson,[56] White[57] and Rapaport[58] are very useful to the adult educator who is seeking an understanding of how the individual adapts to his environment throughout his life span.

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[53] Corey, Lawrence G., "Psychological Adjustment and the Work Role: An Analysis of Occupational Differences". Journal of Applied Psychology. Vol. 43; 253-255; August 1959.

[54] McFarland, Ross A. and O'Doherty, Brion M., "Work and Occupational Skills", in Handbook of Aging and the Individual (J. E. Birron, editor) Chicago: University of Chicago Press, 1959.

[55] Neugarten, Bernice L., "Personality Changes During the Adult Years" Psychological Backgrounds of Adult Education (Raymond G. Kuhlen, editor) Chicago: CSLEA, 1963.

[56] Erikson, Erik H., "Identity and the Life Cycle: Selective Papers" Psychological Issues. Monograph No. 1, 1959.

[57] White, R. W., "Competence and the Psychosexual Stages of Development". Nebraska Symposium on Motivation: 1960 (M. R. Jones, editor) Lincoln: University of Nebraska Press, 1960.

[58] Rapaport, David, "Historical Survey of Psychoanalization Ego Psychology". Psychological Issues. Monograph No. 1, 1959.

Adult motives - understandable and changeable. As indicated by Brunner,[59] research on motivation relevant to adult education still is conspicuously lacking. Individuals - adult education organizations - other institutions in the social system - all have motives which need to be studied, individually and in relation to each other. Kuhlen[60] summarized the important ways in which motivations change during the adult years. He suggests research to identify those factors that influence development changes in adult motivation. Kuhlen's approach to motivation coincides with the Havighurst and Erikson theories of developmental phases in the life cycle.

How do new patterns of expectations and aspirations change motivation to learn and to participate in adult education? Fryer[61] shows how evaluation of aspiration levels can be incorporated into training procedures. Krugman[62] found that, when aspiration levels of older and younger groups were compared, the older group was less flexible in adjusting to success or failure, more vulnerable to stress and in greater need of self-protection. The older group manifested more maladaptive and extreme patterns of response. Parsons[63] found that aspirations for social status are positively correlated with performance under pressure. High ratings and better performance are associated significantly with more rapid recognition.

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[59] Brunner, op. cit. p. 27.

[60] Kuhlen, Raymond G., "Motivational Changes During the Adult Years". Psychological Background of Adult Education. (Raymond G. Kuhlen, editor) Chicago: CSLEA, 1963.

[61] Fryer, Forrest W., "An Evaluation of Level of Aspiration as a Training Procedure". Dissertation Abstracts. Vol. XXIV, No. 3; 1252 P.; 1963.

[62] Krugman, A. D., "A Note on Level of Aspiration Behavior and Aging". Journal of Gerontology. Vol. 14; 222-223; 1959.

[63] Parsons, Oscar A., "Status Needs and Performance Under Failure". Journal of Personality. Vol. 26; 123-138; 1956.

The learning process is believed to be much the same for all age groups, but other forces in the field may be significant determinants of efficiency of learning, motivation, level of aspiration, etc. What needs more study is how these forces affect adult motivations and learning. Kuhlen[64] identifies two kinds of motives, growth-espansion motives, which dominate the first half of the adult years; and anxiety or threat motives, which are important in later years. He indicates that "psychological needs of individuals determine in part those aspects of the environment to which they attend and respond".[65]

Corey,[66] Obeis[67] and Pearson[68] indicate that satisfactory adjustment to retirement varies more with personality, occupational training, education attitudes and values, previous personal, social and job satisfaction and adjustment patterns, than it does with age. These and other works suggest that successful aging is defined in terms of personal values, attitudes and expectations.

Getzels,[69] interpreting recent motivation studies, suggests a movement away from the homeostatic model toward one emphasizing the drive concept of motivation. He contends that the individual may seek stimulation as well as avoid it, and that the optimum state thus would become activity rather than passivity. This approach to motivation, if validated, would have particular bearing on the work of the adult educator in a society that anticipates an increase in leisure and the need for a changing attitude toward work. Getzels suggests that theory, observation and experimentation all point to the conclusion that "There seems to be an optimum level of activation and stimulation. Below this level, increase in stimulation is reinforcing. Above this level, decrease in stimulation is reinforcing".[70]

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[64] Kuhlen, op. cit., p. 77-113.

[65] Ibid., p. 77.

[66] Corey, op. cit., p. 255.

[67] Obeis, Winston, "Age and Achievement and the Technical Man". Personnel Psychology, Vol. 13; 245-259; 1960.

[68] Pearson, Margaret, "The Transition from Work to Retirement". Occupational Psychology. Vol. 31; 139-149; 1957.

[69] Getzels, J. W., "Creative Thinking, Problem-solving, and Instruction", Theories of Learning and Instruction. (Herman C. Richery, editor) Chicago: National Society for the Study of Education; 1964.

Sensitivity to adult characteristics. Teachers of adults need to be sensitive to the great diversity of psychological characteristics among the adults they teach. McKeachie[71] summarized many studies that were designed to seek understanding of instructional methods as they relate to the psychological characteristics of adults. He could make no generalization, indicating that, although the research is promising, no major breakthrough has occurred. The status of knowledge in this area is revealed by his suggestion that "It seems likely that what is effective for one student may be ineffective for others."[72]

As noted in the recent project of the American Educational Research

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[70] Ibid. p. 256.

[71] McKeachie, W. J., "Psychological Characteristics of Adults and Instructional Methods in Adult Education". Psychological Backgrounds of Adult Education. (Raymond, Kuhlen, editor) Chicago: CSLEA; 1963.

[72] Ibid., p. 114.

Association,[73] there are many investigations on teaching that deal with children and college students. However, as great a compilation of research as this document is, one must search it diligently to identify references to studies dealing with voluntary adult learners. This is indeed an indication of the limited amount of completed research on teaching adults.

Another area of education where little sensitivity to the nature of the adult has been noted is the one dealing with low-income individuals and families. Very little research could be found that relates directly to this group, but the interpretations in the recent Passow[74] book point out some profound implications for parent education.

There is a need to understand the individual adult in the various sub-cultures and to be able to diagnose the psychological impact of proposed educational programs and learning experiences on his value system, his personality and his total pattern of behavior. It is not expected that answers will come easy in this area, however, since research on teacher sensitivity to adult psychological characteristics may require a greater interdisciplinary effort than yet has been noted in the literature.

## Other Relevant Concepts and Research Areas

Effect of manner of teaching on adult learning. There has been very little research on methods, techniques and devices used in teaching volunteers. That which has been completed coincides almost exactly with the numerous studies on the effectiveness of selected methods, techniques and devices as used with youth. These tend to indicate that, when a person is motivated to learn, the means by which concept, fact, attitude or skill is transmitted make very little difference.

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[73] American Educational Research Association. Handbook of Research on Teaching. (N. L. Gage, editor) Chicago: Rand McNally and Company; 1963.

[74] Passow, Harry A., (editor), Education in Depressed Areas. New York: Teachers' College, Columbia University; 1963.

Welch and Verner[75] and Verner[76] warn of the considerable difference between research on the processes of education for adults and for youth. They make a useful distinction among method, technique and device. By their delineation, "method" refers to organizing people for learning, "technique" refers to helping the individual learn within that organization, and "device" refers to any one of the multitude of available ways to help enhance the learning. These constitute the major categories of processes of adult education.

This distinction is seldom made in pre-adult education, where the "class" is the accepted and almost universal method. In adult education it is important to make the distinction because of the great variety of organizational patterns that are used. Within this framework, the method is an institutional (administrative) decision, while the choice of techniques and devices is an operational (teacher) decision.

There seems to be a mounting array of evidence that, in general, teaching by television produces no difference in content outcomes from teaching by more conventional means. Summaries of such studies by Schramm[77] and Twyford[78] support the tentative conclusion that television as a teaching technique is just as effective as other techniques a teacher might select. It should be noted here that, in terms of the Verner definitions, television can be either technique or a device that is used within the scope of a variety of mehtods (individual instruction, small group, large group, etc.).

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[75] Welch, John M. and Verner, Coolie, "A Study of two Methods for the Diffusion of Knowledge". Adult Education. Vol. XII; Summer 1962.

[76] Verner, Coolie, A Conceptual Scheme for the Identification and Classification of Processes for Adult Education. Washington, D. C.: Adult Education Association; 1962.

[77] Schramm, Wilbur, What We Know About Learning From Instructional Television. Stanford University; 1961.

Tentative conclusions on the use of programed materials are similar to those for television. In this instance, less research has been accomplished in adult settings. Research in this area is a recent phenomenon and such summaries as the one by Lumsdaine and Glaser[79] are more useful in setting the stage for further study than for giving firm answers which can be used now as a base for teaching decisions. The use of such instructional processes, according to Lumsdaine,[80] "may represent the most important innovation in education since the advent of the textbook".

Adult educators have a tendency to use group discussion techniques indiscriminately. Research on group discussion for purposes other than attitude change is not extensive but some explorations are underway and a few have been reported. For example, Willsey[81] has looked at the use of discussion in terms of its effect on learning of content. Using an experimental design involving three levels of training in group discussion, he found that the participants learned more about the discussion process, but knowledge gain in this area had no measurable effect on gain in knowledge of the content (safety knowledge) being discussed.

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[78] Twyford, Loren C., "Research Abstract", Audio-Visual Communications Review. Vol. 8; No. 1; 1960.

[79] Lumsdaine, A. A. and Glaser, Robert (editors), Teaching Machines and Program Learning: A Source Book. Washington: Department of Audio-Visual Instruction, National Education Association; 1960.

[80] Lumsdaine, A. A., "Instruments and Media of Instruction". Handbook of Research on Teaching. (N. L. Gage, editor) Chicago: Rand McNally and Company; 1963, 592 P.

[81] Willsey, Frank R., "An Experimental Study of an Adult Learning Situation Involving Three Levels of Training in the Group Discussion Process". Dissertation Abstracts. Vol. 23; No. 7-8, University of Indiana; 1962.

The effect of variation in resources on flexibility in teaching. It appears from an examination of the research literature that the setting in which adult education operates is more conducive to use of a variety of methods and, subsequently, to a wider range of choices of techniques than is the class (schoolroom) setting in which almost all youth education is conducted. It follows that the flexibility this demands of the teacher of adults requires greater flexibility of choice and more decisions on all aspects of the educational process. For example, use of group discussion as the master technique of adult education needs to be examined in light of research which indicates its overuse and the need for reconsideration of other processes of teaching.

It is noted in a report on small discussion groups by Davis[82] that there is a positive relationship betwee extent of verbal participation and retention of knowledge. This study was with Great Books Discussion Groups. Since these groups tend to attract the higher socio-economic classes, it is suggested that replications with groups made up of participants with lower socio-economic status be conducted.

Klein,[83] dealing with groups having lower status, suggests that, where verbalization is difficult because of language barriers, activity groups are superior in accomplishment to groups that employ essentially verbal communications.

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[82] Davis, James A., "Compositional Effects, Role Systems, and The Survival of Small Discussion Groups". Public Opinion Quarterly. Vol. 25; No. 4; 1961.

[83] Klein, Joyce G., Adult Education and Treatment in Social Agencies, Washington: Catholic University of American Press; 1960.

Knutson[84] divided task oriented college students into three groups containing individuals who were judged to be "vocal", "quiet" or "very quiet" and determined that the quality of the task performance was better in the quiet and very quiet groups. The vocal group members tended to be more easily satisfied with their own participation and leadership and more positive in their relations with other group members, with the result that they appeared to give their assignment less critical and thoroughgoing consideration.

Several good reviews of the research on many types of small group methods now exist. They provide the adult educator with a firm base for further study. Documents by Hare[85] and Borgatta[86] each carry lists of over a thousand references.

Patterns of educational leadership. No generally superior pattern of educational leadership has been identified, but research on leadership has been increasing. Because of its particular relevance to changing adult behavior, the adult education practicioner continues to seek answers to "how to do it" type questions in the area. At this point, no firm answers are available, but some basic research has been completed that is beginning to contribute to this area of knowledge.

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[84] Knutson, Andie L., "Quiet and Vocal Groups". Sociometry. Vol. 23, No. 1; March 1960.

[85] Hare, Paul A., Handbook of Small Group Research. New York: Free Press of Glencoe; 1962.

[86] Borgatta, Edgar F., "Small Group Research". Current Sociology. Vol. 9, No. 3; 1960.

White and Lippitt[87] provide a comprehensive examination of autocracy, democracy and laissez faire approaches to leadership that help delineate alternative roles under varying conditions. Lipham[88] summarized leadership studies which have implications for administrative theory and practice in education. His summary has direct application to the administrative leadership role of the adult educator.

Bass[89] and others are exploring beyond the trait approach, with special concern for the motivation of the leader in relation to his orientation to tasks. In a recent report, Bass[90] concludes that it is profitable to distinguish the orientation of leaders as self-, interaction- or task-oriented. These orientations correlate consistently with patterns of leadership and other aspects of group behavior. For example, it is the task-oriented member who is likely to be rated most helpful. Bass suggests there is a positive carryover of behavior from one situation to another.

Types of leadership were explored by Fox[91] who dealt with positive and negative styles in group conference settings. His findings suggest superior results for a positive style which employs more democratic processes, uses more ideas from the group, maintains an objective attitude and discourages emotional involvement. Liveright[92] developed a framework for examining informal adult education programs and their leaders and used the framework to explore leadership styles. From his observations have come a number of tenable hypotheses worthy of pursuit.

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[87] White, R. K. and Lippitt, Ronald, Autocracy and Democracy: An Experimental Inquiry. New York: Harper and Brothers; 1960.

[88] Lipham, James M., "Leadership and Motivation"; Behavioral Science and Educational Administration (Daniel E. Griffiths, editor) Chicago: National Society for the Study of Education; 1964.

[89] Bass, Bernard M., Leadership, Psychology, and Organizational Behavior. New York: Harper and Brothers; 1960.

[90] Bass, Bernard M., "Behavior in Groups as a Function of Self-Interaction, and Task Orientation". Journal of Abnormal and Social Psychology. Vol. 66, No. 5; 1963.

[91] Fox, William M., "Group Reaction to Two Types of Conference Leadership". Human Relations. Vol. 10, No. 3; 1957.

Jerome[93] examined the power and morale aspects of leadership in synagogue center boards under autocratic or democratic leadership. He suggests that morale is not affected under these two alternate circumstances but that sub-leadership is depressed under autocratic leadership. Sub-leadership is not depressed under democratic leadership. Goldman, Bohlen and Martin,[94] in a study of college age subjects, noted that group performance was highest and enjoyment of the task was greatest when subjects were working for an equal reward and where the leader received no additional reward.

Leadership research, though moderately extensive, involves such complex subject matter and so many variables that considerably more basic study of its characteristics needs to be made before findings can be used at the applied level where adult educators need them so badly.

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[92] Liveright, A. A., Strategies of Leadership. New York: Harper and Brothers; 1959.

[93] Jerome, David W., "Autocratic and Democratic Leadership and Their Respective Group's Power, Hierarchies and Morale". Dissertation Abstracts. Vol. 24, No. 2; 1963.

[94] Goldman, Morton, Bohlen, Merlyn E. and Martin, Randall B., "Some Conditions Under Which Groups Operate and How this Effects Their Performance". Journal of Social Psychology. Vol. 54, 47-56; 1961.

Using "gate keepers" involves educational risk taking. Education for youth, accomplished largely in the classroom with a teacher in charge, has been essentially a direct line function from professional educator to student learner. Generally this is not the case in adult education. Oftentimes a volunteer is used to transfer materials for learning to the adult learner. These "gate keepers" are called "volunteer local leaders" in the Cooperative Extension Service and "program directors" or "program leaders" in more informally organized groups.

Research in mass communication is extensive, as noted in reviews and books such as the compilation of published research by Klopper[95] and the collection of essays edited by Schramm,[96] but there has been only limited examination of communication effectiveness through volunteers who teach.

Brissey's[97] approach is one that readily could be applied to adult education. In his experiment, material was passed in series to four college age groups beyond the "eyewitness" group. He noted that the "eyewitness" group was best informed, least misinformed and least uninformed.

Wason,[98] dealing with transfer of materials in writing precis, noted a lower achievement of salient points from reading the precis than from reading the original documents. This research is not conclusive. The number of details which is optimum in a precis or abstract is a topic for further research, and such qualities as explicitness, ordering of items, clarity and rhythm cannot be ignored in the search for improved ways to communicate ideas, concepts, attitudes and skills from adult teahcer or change agent to learners.

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[95] Klopper, Joseph T., The Effects of Mass Communication. Glencoe: The Free Press; 1960.

[96] Schramm, Wilbur (editor), The Science of Human Communication. New York: Basic Books, Inc.; 1963.

[97] Brissey, F. L., "The Factor of Relevance in Serial Reproduction of Information". Journal of Communication. Vol. 11, No. 4; December 1961.

[98] Wason, P. C., "The Retention of Material Presented Through Precis". Journal of Communications. Vol. 12, No. 1; March 1962.

According to an exploratory study by Kreitlow,[99] the situation in which adult education was undertaken appeared to have as much effect on loss of content as did the use of a local leader to transfer of the message from a film and a bulletin from a meeting in which professional educators were present to one in which they were not present. The loss in the content transferred intact by bulletin and film was of about the same magnitude as that transferred by a non-professional (local volunteer leader of a homemaking club) using the lecture.

Under the variety of circumstances and settings in which adult education must operate, a firmer footing in research-based understanding is needed before the use of volunteers as teachers can be accepted with confidence.

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[99] Kreitlow, Burton W., Long-Term Study of Education Effectiveness. Cooperative Research Project 375. Madison: University of Wisconsin, Department of Agricultural and Extension Education; September 1962.

# PART THREE

## Research Areas Needing Attention

There is a veritable orchestra of research needs in adult education, but careful listening will identify the different themes. Certain notes can be heard again and again in every phase and kind of adult education. Others are heard very infrequently but, when heard, they stand out like hammer blows on a glockenspiel. Still others are all but lost in the stream of sound.

The main theme is identified in this report. In reviewing the literature it is noted that each discipline and each applied field believes that its notes are the most important. Any reviewer of the field may miss completely some of the notes. This limitation is recognized and accounts for the aid sought from the conferees in reviewing the earlier summary.

Often the same sound comes from several sources and the research problem can be identified under several areas. For example, the need to know more about the psychological impact of the various media of communication can be identified in either or both psychology and communication.

The interrelations among problems and resource fields make necessary a minimum framework about which to organize the findings.

### Framework for Research

Research needs found in the literature and suggested by the interviewees could be structured in a number of ways. Reasonable structures can be developed in ways such as:

By program area (Homemaking, parent education, vocational training, liberal studies, etc.)

By institution ( public schools, evening college, Cooperative Extension, libraries, etc.)

By discipline (psychology, anthropology, sociology, etc.)

By application (learning, teaching, social change, guidance, etc.)

The framework chosen here is by application. In this type of structure, some of the identified areas of research need will be tied almost completely to a specific discipline or an applied field and some will be associated with certain program areas.

In structuring the research needs by application, care is taken not to overlook the potential of basic research in any discipline. Research which eventually may contribute to adult education is not limited to that which now shows a promising line of application. The potential for projective, theoretical and speculative research in the field is developed from the interrelationships between the applied fields and the disciplines and should be recognized. It is often in the speculative area that breakthroughs on new approaches to investigation are made.

The choice of a framework related to application is somewhat allied to the reference points used by Brunner in An Overview of Adult Education Research.[100] It is unlike the chapter in the Handbook of Adult Education[101] which is organized around program areas and institutions; and it is unlike the Hendrickson[102] chapter in the Encyclopedia of Educational Research which concentrates on programs.

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[100] Brunner, Edmund deS.; Wilder, David S.; Kirchner, Corinne; Newberry, John S.; An Overview of Adult Education Research. Adult Education Association of the U.S.A., 1959.

[101] Kreitlow, Burton W., "Research in Adult Education", Handbook of Adult Education in the United States. Chicago: Adult Education Association of the U.S.A., 1960.

[102] Hendrickson, Andrew, "Adult Education", Encyclopedia of Educational Research (Chester W. Harris, editor) New York: The Macmillan Co., 1960.

In listing the research needs, no order of importance (first to last) is suggested, but those areas where greatest emphasis has been noted in the literature, interviews and discussions are identified as having priority.

## Needed Research

Research needs identified during the course of this investigation are organized into three interrelated categories. The three categories of application, noted in Figure 1, are:

I. The Adult as an Individual and a Learner

II. The Adult's Response to Social-Cultural Phenomena

III. The Adult Education Enterprise

In some instances the area of research needs is arbitarily placed in one category of application when it is also closely allied with another. This is noted in the item on personality and behavior change ( I, 2 ) which could be placed in either the Learning or the Adult's Response category. It would also be reasonable to reinterpret several of the areas of need in the Adult Education Enterprise category and place them in Learning or Adult's Response. It is the intent of this report to provide a tenable structure that can be used as a base for further development.

Figure 1 also demonstrates that there are disciplines in addition to psychology, sociology and anthropology which contribute to the field. All of these disciplines, in coordination with the adult education enterprises and the total field of education, provide the climate in which projection, theory building and speculation can occur. When this occurs the potential is present for developmental and experimental programs in adult education.

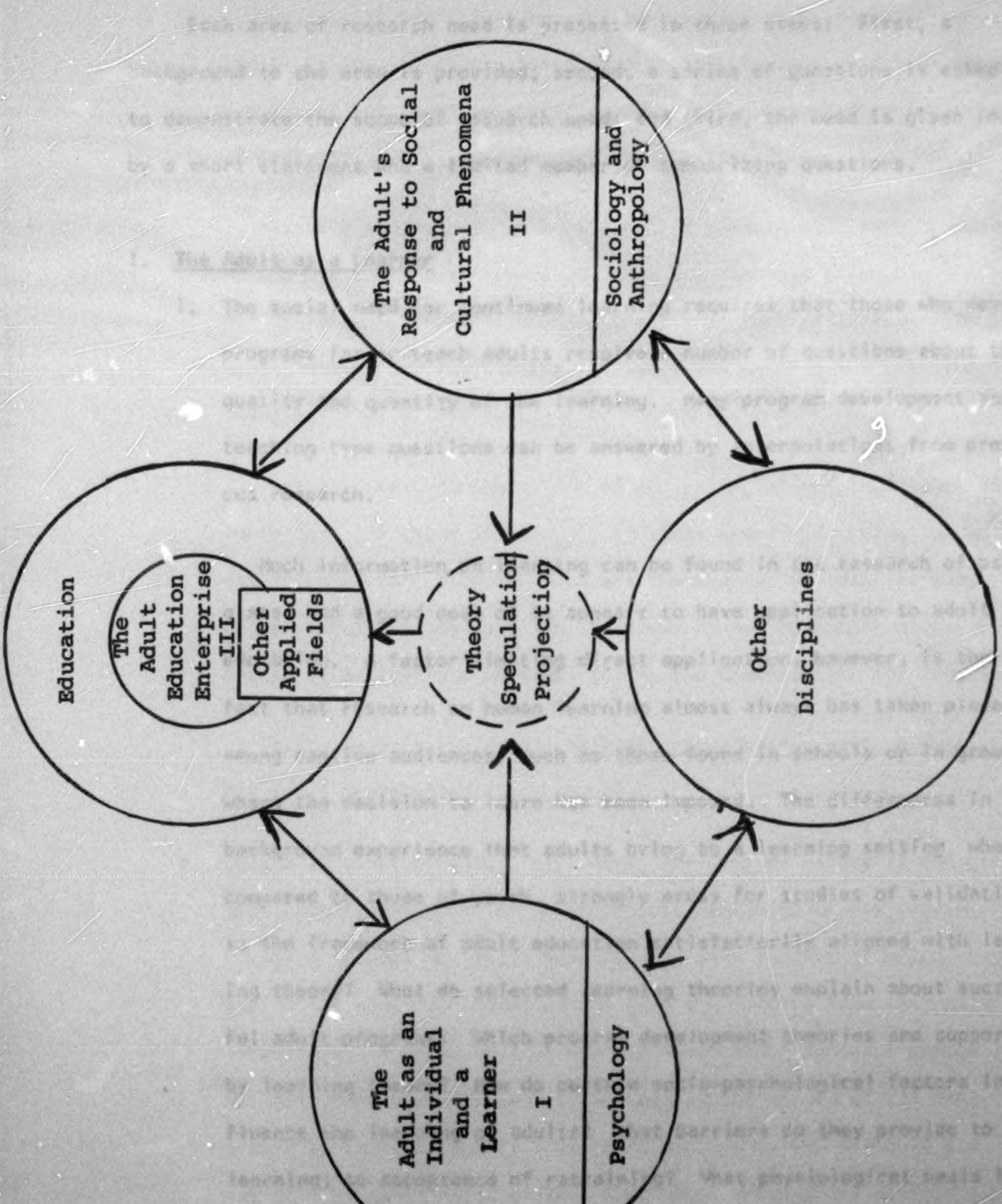
The Adult as an Individual and a Learner
I
Psychology
Education
The Adult Education Enterprise
III
Other Applied Fields
The Adult's Response to Social and Cultural Phenomena
II
Sociology and Anthropology
Theory
Speculation
Projection
Other Disciplines

Figure 1--A Schema of Research Needs in Adult Education

Each area of research need is presented in three steps: First, a background to the area is provided; second, a series of questions is asked to demonstrate the scope of research need; and third, the need is given focus by a short statement and a limited number of summarizing questions.

## I. The Adult as a Learner

1. The social need for continued learning requires that those who develop programs for or teach adults resolve a number of questions about the quality and quantity of the learning. Many program development and teaching type questions can be answered by interpolations from previous research.

   Much information on learning can be found in the research of psychogists, and a good deal of it appears to have application to adult education. A factor limiting direct application, however, is the fact that research on human learning almost always has taken place among captive audiences, such as those found in schools or in groups where the decision to learn has been imposed. The differences in background experience that adults bring to a learning setting, when compared to those of youth, strongly press for studies of validation. Is the framework of adult education satisfactorily aligned with learning theory? What do selected learning theories explain about successful adult programs? Which program development theories are supported by learning theory? How do certain socio-psychological factors influence the learning of adults? What barriers do they provide to learning; to acceptance of retraining? What physiological basis is there for a differential approach to learning by adults?

What social conditions are the most conducive to learning? How do social values affect the learning process? To what extent do value demands affect learning outcomes? What are the social consequences of learning new skills; adopting new practices?

What are the functional relationships between successful group action and individual learning? What are the most effective conditions for learning as an individual; in pairs; as part of a group? To what extent does group involvement influence the quality and quantity of learning?

What are the best predictors of the potential for individual adult learning? Are there process distinctions between learning for work and learning for leisure? What are the changes in learning that occur with increased age? How do these relate to social class; the nature of motivation; personal goals, the organization for teaching?

This is a priority area: What are the most appropriate conditions for adult learning?

2. Change in overt behavior, attitudes, feelings or values is the ultimate educational goal for which learning experiences are provided. A change in adult behavior depends upon many factors of which some are known, some are suggested and some are missing from the research literature. A great deal of what is known about behavior change in children does apply to adults, but again, the nature of the background an adult brings to a learning experience may stand in the way of a gross transfer of this knowledge. Adults are different

from children. Changing the behavior of one is not the same as changing the behavior of the other. Thus, those involved in planning programs for and teaching adults ask questions about changing adult behavior that have yet to be answered by psychologists and sociologists. Are the developmental psychology concepts, "developmental tasks" and "dominant concerns of adulthood", usuable benchmarks for planning behavior change? What is the most useful model for development in the adult years? Is the concept of "margin" valid and useful in teaching adults? In planning for behavior change, how important is the client's personal commitment; his self-insight? How are these developed? How does the educator use or overcome group pressure and social values in order to bring about change?

What is the effect of "nonwork" on the potential for behavior change? In what ways do social values, social structure and language patterns restrict or encourage change? What are the psychological conditions under which behavior change is the most stable or flexible--when self-determined; when determined by a small group, or by a community?

In what way does the nature of the goal--learning or action-oriented--relate to behavior change?

More knowledge about the pressures for and against behavior change is a research need of high priority: What are the personal (internal) and social (external) factors that lead to changed behavior in adults?

3. Most youth accept school attendance, classes and learning as a fact of life over which they have no control. Adults tend to have a great deal of control over their participation in continued learning activities. With youth, the teacher uses a variety of approaches to get the individual in the class (the captive) to want to learn. With adults, the teacher uses a variety of approaches to get the individual to come to the class (conference, meeting, discussion group, etc.) or to select materials or take action for self-study (reading, educational television or radio, gallery, etc.).

Although the characteristics of motivation may be much the same for youth and adults, the adult educator, would prefer to use what psychologists have reported on studies with adult subjects. However, there are many gaps in this kind of knowledge at both youth and adult level. This gives rise to a series of questions needing further research and interpretation.

Are the findings of studies dealing with the educational motivations of youth and college students (young adults) application to educational programs for adults in general? What are the quantitative differences among selected motivating factors for youth and adults? Are there differences between these two groups in how selected factors stimulate the imagination and the will to act?

In what ways is motivational orientation (learning, goal, activity) related to learning and behavior change? How does the level of motivation relate to such change? Under what conditions and to what extent can motives be modified through adult education? Are the concepts of "growth-expansion" and "anxiety-treat" useful in dealing with adult motives at different periods oflife? In what ways do motives vary among culture groups and what patterns of response do different groups make to external forces of motivation. How do adults with different patterns of motivation respond to flexibility or stability in an educational program? What are the characteristics of motivation change in the later adult years?

The results of previous studies on motivation must be applied to the volunteer adult setting, and new investigations must be undertaken that are specific to the adult: What factors prompt adult participation in learning activities (individual or group) and what are the means by which these factors are internalized?

4. The attitudes of adults are being studied a great deal by behavioral scientists and surveys and polls have been used more extensively each year. In the field of advertising, the search for information on the attitudes of consumers has spearheaded a drive for better understanding of attitudes and the use of this understanding to change attitudes and buying habits. In this descriptive type research, psychologists and sociologists have used many adult subjects, thus making possible a more direct application to adult education than is the case with most research.

In recent studies on attitudes the major concern has been to identify the response covariation along with attitude description. Knowledge of the attitudes of adults and their interrelationships are of prime importance in an educational program where the participants are volunteers. This requires of the educator not only a basic knowledge of attitudes and their psychological base, how to measure them and what relationships they have to each other, but, more specifically, how they can be changed to enhance learning. The promising research completed in this area has not reached the point where it is ready for wide application. The adult educator has many questions about attitudes that need to be answered.

What are the interrelationships among attitudes toward continued learning and such factors as willingness to participate in an educational enterprise, to forego nonwork leisure hours, to change jobs or to migrate to other geographic locations? In what ways are positive attitudes toward learning developed? Can the attitudes of a group toward that which is being taught be made more positive? Does the atmosphere of the group (interpersonal feelings within the group) affect attitudes toward learning? What attitudes in an adult are conducive to accepting leadership roles in programs where volunteers teach? What effect do resistors to change have upon their peers?

Are an individual's attitudes more difficult to change if they are group anchored? If they are, how can they be changed through group action? How can the adult educator use knowledge about attitude differences among social classes? How can he use knowledge of adult attitudes in recruiting participants for educational programs? What kinds of learning experiences are most effective in changing attitudes?

A few adult educators may be "artists" who perceive by some inherent sixth sense just how to adjust self and program to client attitudes. But, for most, only research on the problem area will suffice: *In what ways can knowledge of adult attitudes be used to change, develop or guide programs of continued learning*?

5. The literature on adult interests is more confusing and contradictory than research on the interests of youth. There are few firm bases upon which to build practice. In adult education, where the interest of an individual may be the factor leading to a tentative decision to seek a new behavior or new knowledge and thus participate in a program, the concern for more knowledge about interests is urgent. The part aptitudes, social expectations and values play in determining interests, if and when clearly identified and understood, would be of great value to adult educators.

What are the psychological ingredients of interest change? What factors lead to such change? How can adult interests be identified or measured? To what extent is participation in a program of learning a function of a measurable interest? How can the knowledge of interest variation among social classes and in different social groups be used in developing educational programs? How can knowledge of interests be used in recruitment to programs? To what extent are interests built upon random success experiences? What are the factors of congeniality which, if used jointly with measures of interests, can be used to predict the degree of success in vocational adult education programs. Is greater participation in adult education activities associated with more or less stable adult interest patterns?

The area of interests has much to offer adult educators when sufficiently refined by research to make generalizations possible. The area of concern is: In what ways can knowledge of adult interests be used to improve the quantity and quality of participation in adult education programs?

6. Personality development is such a conglomerate of concepts that no single framework to describe it has yet been devised by the behavorial scientists. Here is an area for research where major concern has been identified by adult educators. The development, structure and functioning of personality in the adult years, when well understood, would give the educator a sounder base upon which to build many aspects of his program.

In general, the adult educator looks at personality from the behavioristic point of view, perceiving the behavior of the adult in relation to learning opportunities that are available. He sees in continuing education not only the practical value potential related to new skills, attitudes, and knowledge but a potential for education as a continuing shaper of personality. When he approaches personality from this stance, but is aware of the lack of definitiveness in the research literature on the subject, he becomes an avid seeker for knowledge about personality manifestations.

Are there predictable personality changes during the adult years? What is the continuity of personality change from one decade of life to the next? What environmental influences are most marked in relation to the personality of adults? In what ways do programs of continued learning (individual or group, self or agency directed ) influence personality development?

What are the anticipated responses of adults with different personality patterns to educational stimulation and opportunity? What personality patterns are associated with selected social class and other cultural variables (language, education, ethnic background, income, etc.)? What do each of the major theoretical frameworks of personality development suggest for the action level of adult education?

Do role conflicts in family and community situations influence the potential for educational participation and personality change? Do the personality characteristics of professional and volunteer adult teachers influence participation in and effectiveness of learning experiences for adult or potential adult participants?

An area of research concern for adult educators is built around the need for a better understanding of personality: What are the characteristics of personality change in the adult years, what factors influence the change patterns, and in what ways can knowledge of these factors be applied in programs of continuing education?

7. The adult educator is responding to a changing educational situation as he identified his need for knowledge of the adult learner and the process of learning. The pressures for continued learning guide him to seek answers to questions about the continuity of learning throughout the life span, the ability of the adult to learn, the different

response patterns to different learning tasks, and the nature of the "learning to learn" concept.

The mounting pressures of modern society for a more learned adult have focused attention on the need to know more about him and how he learns. The research and development activities that have been recorded are far from adequate to resolve the key questions which need resolution. When applied to adults, many of the past studies lack both focus and depth; others deal with the wrong problems. The security of the adult educator often is threatened by false generalizations from findings of research dealing with youth in formal classrooms.

What is the nature of the "learning to learn" concept? Does learning to learn follow a different development pattern in youth than in adulthood? To what extent has the high school or college graduate achieved this state? In what ways does overdeveloped behavior of adults interfere with continued learning? What is the relationship between the instructional methods and techniques applied and the development of an adult's learning on his own? What methods and techniques of instruction interfere with the "learning to learn" concept?

The development of youths or adults who have "learned to learn" is an ideal goal for adult educators. There is a search for a better understanding of the concept and a means for its development: What are the conditions under which one learns to learn and what educational ingredients encourage learning to learn in adults?

## II. The Adult's Response of Socio-Cultural Phenomena

1. There is a bond between education for individual change, small group change and broad social change. This being noted, educators and sociologists have been engaged individually and jointly on investigations of the process of change. Although under a variety of titles, many of these studies are focused on the adoption process. They trace specific practices from individual exposure or awareness to general community adoption. In the course of the research a framework has been developed that in some instances can identify everyone from the innovator to the late or last adopter.

The process of diffusing technical, social and cultural information into a community is of such concern that one author was able to cite 506 references dealing only with that general topic. In spite of the great wave of scientific interest in change that has developed during the past decade, many of the first questions to be asked have yet to be answered. A good base has been set, however, and useful frameworks for organizing and analyzing data have been designed.

At what stages in the social action process is an "input" of education most effective in producing change? Which socio-cultural background factors stand in the way of accepting change and new ideas? Which encourage innovation? Which, if supported by educators, aid or delay adoption? What is the role of the "change agent" (educator) in bringing about social action? Can a useful framework of community development be established as a base for scientific study of educed community change? What are the results of selected patterns of outside innovation on the individual, the group and the community?

What are the response patterns of different social groups to outside and inside change agents? What is the role of crisis in bringing about change? In what ways is social control maintained or reestablished during or after a period of great social readjustment induced by technological factors? What changes in the role of the individual in his social group occur as a result of cybernation? Can the educator use technological change advantageously in programs of individual and community development? To what extent does tampering with a community's social and economic structure bring positive outcomes?

This area of research need should be continued as one of high priority: What are the factors of socio-cultural change that most influence human behavior--individual, family, community? In what areas of human concern are educator-induced social actions useful? In what ways can positive action be achieved?

2. The concept of "anticipation of change" by the individual adult, family or community is as important a concept to the sociologist as the "learning to learn" concept is important to the psychologist. It is recognized that in the United States culture change is expected to occur, and there are those who look forward to change with a considerable degree of satisfaction. There are others who look toward change with dissatisfaction and willingly delay the effects of change as long as they can.

The adult educator, by the nature of his field of work, tends to deal more closely with those who anticipate change than with those who would delay it. There is knowledge of both groups that is helpful in adult programs but, at this stage in the development of the field, the educator and the participant tend to respond program-wise to change that has occurred rather than to change that is anticipated.

What are the socio-cultural factors which lead to planning for change on the part of adults? What are the differential responses to new social organizations of adults who welcome change and those who wish to delay it? What are the differential responses of those with varying levels of anticipation of change to educational programs based on established changes; developing changes; potential changes?

Should the educator encourage programs that deal with the potential rather than the fact of change? What is the effect of anticipatory programs on the social order? What is the influence of those who anticipate change on the social order; on the precipitation of change; on the educational programs in which they participate? What factors and methods can be used to identify adults who respond to change in different ways?

An important followup of the studies of adoption and educator induced social action lies in a study of those who anticipate change: What factors are responsible for a positive anticipation of change? What characteristics of educational programs elicit positive learning responses from those with different change anticipation patterns?

3. There are a variety of demographic and ecological problems of society that have been given consideration by sociologists and educators. Certain aspects of such problems have been suggested as barriers to the extensive retraining that is necessary in a country where business and industry are rapidly being automated and where maximum effectiveness from the labor force is demanded. Technological advances always raise questions of concern to educators.

Is retraining more effective prior to or after change in employment? Is compulsory retraining effective when jobs are being eliminated? To what extent will retrained workers migrate to other areas for work? Should liberalizing studies accompany retraining if migration is likely to occur? What is the effect of liberalizing studies on migration? What is the relative cultural strength of community and vocational ties? How can they be changed? What are the socio-psychological barriers to migration that technological change induces? What is the role of the educator in helping a community adjust to loss of a substantial portion of its labor force? What adjustments are needed in the structural frame work for education as a result of new spatial distributions in rural, urban and suburban homesites?

Adult educators are faced with different kinds of problems in this area of research need: What is the role of the educator in helping adults make the social, physical and retraining adjustments arising as a consequence of changes in the labor force and the nature of work?

4. The decisions about what to teach and how to teach that are made by the educator, and the decision about whether or not to make the effort to learn that is made by the adult subject, have a substantial impact on the surrounding society. Certain relationships between participation in adult education activities and social status, education level, economic level, and general cultural level of the adult have been known for some time. There are, however, a large number of unanswered questions that, if resolved, would aid educators create new ways of reaching adults, program for more effective learning and understand both failure and success of ongoing programs.

Social relationships among clientele, both in class and out, have become a fruitful field for investigation. Many findings in learning and adult development can be applied effectively in education only if the society and its local structure are understood. Because of this need, educators seek answers to a host of questions about relationships among people and groups.

What are the barriers to communication from one social class to another? What differences exist among classes on the value attached to participation? What kinds of approaches to learning are effective with lower socioeconomic class adults? What barriers to learning exist in urban slums and rural impoverished areas? Can useful instruments be developed to provide valid local evidence to the educator on such factors as community power structure, class systems, and community values?

How do culture-induced objectives affect the organization of educational programs? What role is seen for adult education by different community groups? What does each group see as its scope, its function and its status in both educational and social organizations? What influence does type of family structure have on participation and learning in a community?

How does a learning group form its social structure? What kinds of social systems develop and operate in the classroom, in conferences and in ongoing voluntary adult education programs? How does the social climate of a community affect program planning, participation, acceptance of leadership and, ultimately, the learning outcomes of an adult education programs?

This is a priority area: What socioeconomic and cultural information is valuable to adult education programs? In what ways can such information be used effectively?

5. There are a number of developmental aspects of the emerging field of adult education which, if understood, would help promote its continued growth. The experiences of adult educators in a great variety of settings under the sponsorship of many different agencies and organizations have not been sufficiently integrated to build a general frame of reference for the field. There is much that a historical view of this field can do to help develop the framework and provide guidelines for growth. The contributions of historians to the study of adult education's past cannot be overlooked. In a research frame work

dealing with application the historian's role can well be integrated with the sociologist as patterns of development are noted.

To whom have different types of programs appealed in the past? What does content analysis of programs over several decades tell about the changing nature of offerings and their acceptance by differing social-cultural groups? What do program format and content explain about the way adult educators have responded to changing learning theory and to knowledge of society? How have adult educators responded to general changes in values and social norms; to specific changes in technology and means of communication?

Before making a forward thrust of consequence, adult educators need a clearer perspective of their own past as it relates to social and cultural phenomena: What factors, principles and philosophy underlie the response of adult education to changes in the social and cultural setting?

## III. The Adult Education Enterprise

### The purpose and goals of adult education

1. The literature in adult education is awash with subjective documentation dealing with a great variety of concerns, potentials, goals, and statements of what the purposes of adult education ought to be. Committees have been established to describe and develop the social philosophy of the field. Agencies of adult education tend to revise original documents identifying their goals every ten years, usually from the base of the earlier statement rather than from the base of the present setting in which it operates.

A number of historical studies provide some perspective on the changes in purposes and goals of adult education throughout the years but research has yet to give the overall view of the past that is needed. Statements on present goals and objectives of the many separate agencies have not been analyzed in a fashion that provides a useful structure for either administrator or teacher, Thus, a continuous call for integrated studies of purposes and goals is noted in the literature and among leaders of the field. Most of the following questions would not have to be asked if the goals and purposes of the field were clear.

What is adult education all about? What is it trying to do? Where is it really heading? Are there efforts toward coordination in the field? What is adult education's philosophical base? To what is the field of adult education committed? Does the adult eductor know only what he has observed or does he have some broad purpose to his action?

In what ways are the goals of adult education coordinated with those of education for youth? Is it the purpose of the educator to deal only with goals identified by the client or is there a more global purpose of the field? To what extent is there an overlapping among the goals and purposes of the different agencies of adult education? Are overlapping goals among agencies conducive to positive outcomes?

There is a need for normative and descriptive studies of adult education's goals and purposes: What purposes have been sought and achieved, what goals and purposes are now being sought, and what should programs of adult education be trying to achieve?

2. Adult education enterprises are scattered through various branches and levels of government, are on the periphery of public education programs from elementary through graduate schools, and are organized for the educationally, economically, and socially illiterate as well as for those with Ph.D. degrees. The scope of educational programs for adults is almost beyond belief. Programs are established by business and industry to retrain workers and to provide liberalizing experiences for executives. Professional fields develop induction training programs and post-doctoral seminars. Universities teach farmers how to apply fertilizer and economicss how to control production. Voluntary agencies and organizations provide study opportunities in life saving, picture taking, international relations and philosophy. Libraries in a single evening provide their resources to encourage study of conversational French for tourists and great ideas of Western civilization for homemakers.

Small wonder the adult educators are asking: What am I supposed to be doing? The goals and purposes of adult education are so broad and pervasive on the one hand and so narrow and focused on the other that one would expect educational schizophrenia as a routine outcome of being too long in the field! A combination of policy studies and research is needed to provide a clearer image of the goals and purposes of continuing education.

To what extent should selected agencies or organizations limit their goals and purposes? Would integration of planning by the many groups providing education for adults be desirable? To what extent are the learning goals of adults and the educational objectives of the agency coordinated within a program? By what means can the adult educator identify the goals and purposes of the client? Is it possible to distinguish client needs from client wishes? To what extent is a client's ability level in the area of agency goals the determining factor in his participation in a program? What criteria should be used to determine goals of groups needing or seeking continued learning? Should the adult educator take into account in establishing goals and purposes of educational programs the great variation among clients' social and economic status?

At this point in time the coordination among agencies in their search for goals and a central purpose has a higher priority than the need for research. The need for research, however, should not be overlooked: What should be the relationship between the immediate and long-term goals of adult education agencies?

Understanding adult education.

3. Although the practice of continuous learning has not gained sufficient acceptance to be considered characteristic in the United States, a leadership climate favorable to its development now exists. There are those who use the increasing enrollments in colleges and graduate schools as evidence of the acceptance of this practice. There are others who point to other than learning reasons for the increased enrollment and follow with a generalization as to the millions whose attitude toward continued learning is anything but positive. From the literature and through interview come questions about the development of continued learning that beg for answers.

   Should special efforts be made to develop a continuous learning experience, or will it suffice to wait for the pressures of social change to mold it into the value system of the family? Should this pattern be developed in the early years of formal education? Can it be taught? If it can be taught, what type of learning situations, what scope,and what sequences will be effective? Should this be the task of a social agency or of the home? What contributions can elementary and secondary schools and colleges make toward the development of the practice? How general is the acceptance of continuous learning among varying social and economic settings (social classes, econimic levels, age levels, employment classifications, ethnic backgrounds, places of abode)?

This is an area of both theoretical and practical research need: To what extent does the practice of continuous learning exist? How can the practice of continuous learning be developed effectively?

4. Among the established institutions of our society adult education almost always appears at the margin and seldom near the center of activities. In the educational programs of most school districts, the adult program gets tacked on as an afterthought, if at all. Business and industry rarely seek the competent educator to develop an inservice program; instead, a technician is given this responsibility and the educational program is begun by trial and error.

How does marginality affect attitudes toward and outcomes of educational programs for adults? Does it discourage commitment or alter worthwhile forms? Does the layman understand what adult educators are up to? How can adult educators build acceptance for themselves and the program? What effect does this marginal image have on learning in the classroom, in the shop, in the home? How is the morale of adult educators affected by their marginal position in agencies, professional associations or communities?

The methods and application of historical research need to be focused on marginality: How have once marginal fields of work overcome the handicap of marginality and gained both internal and external acceptance?

5. The many different research approaches to participation of adults in continuing education point up the lack of focus on how to obtain data on this vital subject. Nevertheless, emphasized throughout the extensive literature is concern for the problem of participation and the values to accrue from its resolution.

What clues to participation and subsequent learning come from information about the attitudes and interests of adults? How do general community social needs influence the participation of adults in selected programs? Under what conditions do threat and social pressure lead to participation and learning in organized groups? In what ways does the social climate within the group affect continued participation for learning purposes?

In what ways are individual personality characteristics relates to participation? To what extent is the goal of self-study encouraged by participation in learning groups? How do internal and external goal assessment affect participation in learning activities? What aspects of method and technique affect continued participation? What are the most effective means of appraising the quality of participation?

Recently there has been an increase in participation studies (Johnstone, etc.) but little beyond gross participation has been examined: What are the influences of different adult group participation patterns and independent study on the achievement of selected goals?

6. The Social, cultural, educational and technical climate in the United States has become more positive toward continued learning during the past decade than during any previous period of history. It is because of this climate that the resources for continued learning are being sought, developed and appraised. Yet, the literature in this field provides limited assistance in answering questions about the location and use of resources.

What resources of elementary and secondary schools are available for adult programs? What resources of government are available to the field? By what means can continued learning programs be financed? What human resources (professional and voluntary) are available for program development? What is the value to adult education of such resources as museums and the theatre? How can these resources be used? What financial and human resources in voluntary associations and professional groups are available for education? How can human resources in developing technical fields be utilized?

It can be generalized that almost unlimited resources are available if they can be identified and their potential use understood. Thus: In what ways can the potential resources for continued learning be organized, integrated and activated to meet society's need for intellectual growth?

The educational process.

7. The literature makes clear that teaching adults requires more than the application of a selected pattern of methods and techniques. Without such a pattern and faced with a clientele whose only

compulsion to participate is its own, the adult educator often feels that he must be an educational and content expert, artist, comic, diplomat and policeman at one and the same time.

He borrows from college, grade and secondary school teachers; he questions his colleagues; he reads a dozen different answers to the same question in professional journals; and he continues to teach. But all of the time he carries unanswered questions around with him. He is tempted to create new forms for teaching adults because, somehow, those used for dealing with captive audiences never quite fit. Some adult teachers become insecure in their lack of knowledge of the educational process; others develop the ego of an artist; but most continue to seek answers to questions related to instructional improvement.

What are the conditions under which major methods of reaching adults are effective (small group, large group, individual, classes, mass media, etc.)? Within each method, what teaching techniques are most appropriate (discussion, panel, correspondence study, lecture, television, etc.)? How can the human and physical resources of the community be used to enrich adult learning? What relationship to the client is the best to establish for a particular program and set of objectives? What adjustments in teaching should be made when dealing with divergent communities and social groups? How should the learning environment be changed for different types of objectives? Under what conditions can volunteer teachers be used with success? How can one's own adult teaching competency be assessed? What stereotype of adult educators is held by adults? How does attitude toward the adult relate to teaching effectiveness of full-time, part-time and volunteer adult teachers? What do adults expect of the teacher or adult program leader? What are the useful ways of developing the goal of "self-education" among adults?

Although this area of research need lacks a firm structure, it is of great priority to those who are teaching: How can the teacher be effective in his communication with and stimulation and development of the adults he seeks to teach?

8. Much of adult education is accomplished in groups. The teacher who organizes groups in which instruction and learning will occur has some control over them. For other groups, there are instructional, physical, social and emotional controls that he either imposes, encourages or allows.

With instructional groups making up as large a proportion of the adult learning setting as they do, it is not surprising that answers to questions about these groups are sought by teacher and administrator alike. During the past two decades educators, psychologists and sociologists have begun to study these groups and much has been developed to help the teacher. Yet, the inconsistencies provide a side-dressing of confusion. Many attempts have been made to develop paradigms for aiding the researcher in studying the phenomena of instructional groups but, as yet, no generally acceptable pattern has been found. Adult educators continue to ask questions which needed firm research-based answers long ago.

In what ways do the interactions among members of a learning group affect learning outcomes? How do group pressures (internal or external) divert or encourage learning? Under what conditions will reflection on learning be developed in a group? Does social structure within the group affect teaching and learning? How can knowledge of this structure be used for positive gain? What effect does the small group structure have on communication? Under what conditions do actions in a learning group reflect the social setting; the psychological pressures; the emotional concerns of individuals and subgroups? What findings from the studies on group dynamics can be adapted for groups with content objectives; with decision and action objectives?

By what means is an instructor able to resolve or avoid cognitive conflicts in the classroom? What is the relationship between such conflicts and learning productivity? What are the effects of intragroup interaction in the teaching of values; skills; concepts? Can problem solving techniques be used to develop stability in an instructional group? What individual behavior roles influence learning outcomes? How can these roles be established or diverted?

There is much in this priority area that needs organization before it will be useful to the adult educator who asks: What resources within the instructional group can be used to maximize the achievement of individual and group objectives?

9. The area of leadership has been of concern to adult educators because of their dependence upon voluntary participation in educational programs and the extensive use the Cooperative Extension Service and other agencies have made of volunteers to provide leadership in their programs. The matter of dealing with adults rather than children inserts a very different factor into the setting for leadership. The uncertainties created by forces of change provide further complications to the setting in which leadership is sought.

Much has been written about leadership, but only recently have psychologists and sociologists given specific attention to it as an area of research. This attention coincides with the increasing participation of adults in educational programs and the growing number of special interest groups seeking to lead others toward program goals. Because of this recency of intensified interest, there are numerous problems of definition throughout the leadership field remaining to be resolved.

The adult educators, in their predisposition toward idealism, often overlook studies of leadership that border on manipulation or deliberate management of people. Management and advertising studies have much basic material to offer the adult educator who seeks research answers to certain kinds of leadership questions.

What are the characteristics of a leadership role that promotes learning? Can it be developed among volunteer participants? To what extent is one's subject-matter competency a factor in establishing a leadership role in a learning setting?

Does one's expressed attitude toward learning affect his leadership? Are volunteers or professionals more effective in leading lower socioeconomic groups to continued learning? What characteristics are associated with effectiveness? What personal psychological factors are related to an adult's volunteering for a leadership role in an adult educator's program? What sociological factors are so related? Which methods of leadership training bring about the most constructive social outcomes in terms of the individual who is trained and the group which is led?

A great deal of investigation by educators, psychologists, and sociologists is needed in this area: In what ways do learning experiences as a volunteer teacher (leader) add to the learning outcomes of educational programs using volunteer teachers (leaders)? What personal and social factors influence the effectiveness of volunteer leaders?

10. There are no exceptions: Communication, whether by seeing, hearing, smelling, tasting, or touching or by some sixth sense, is a necessary ingredient for adult learning. Too often adult educators have taken communication for granted. In doing so, researchers in communication have neglected many of the problems related to adult instruction which, when resolved, could make for greater educational production. Communication has become such a large part of daily living that it cannot be ignored by educators or anyone else.

Visual and oral communication, by whatever means or techniques, are only as effective as their purpose. It is this purpose, the deliberate objective of contemporary multi-communication oriented society, that adult educators are beginning to ask about. They ask why they have not been too effective in using these new inventions of man to better meet his educational needs. They want to know how to interpret for adult learning what is known about communication and to identify any new knowledge to be gained by further research.

In what ways can a common base of experience be provided for the communication process? What are the starting points of experience that can be used as a channel for communication among vocational and professional groups, socio-economic classes, educational levels?

What is the psychological impact of selected communications media on learning? How does the form of presentation (language and style) influence behavior? Under what conditions will selected means of communication block learning? In what ways does language usage help develop or deny the social process? How can feedback be used to improve the climate of learning? What distinctions in communication should be made in dealing with different types of social groups? What are the communication variables that need to be considered in teaching individuals or groups; instructing or propagandizing; persuading or teaching; teaching in a formal or an informal setting?

This area of research need is most important to the adult educator at the teaching level: What are the means by which communication can be effectively used to help reach adult program goals?

11. Increasing efforts toward automation, the development of new materials and new kinds of services, the drastic reduction of the common labor class in society and the virtual disappearance of the small farmer all provide pressure points for action in adult education. The direction of the pressure often leads to a recognition of the need for retraining of a technical nature.

Often this retraining must begin at a level of high basic skill which tends to eliminate from the potential learning group those whose skills and abilities are not sufficient to provide an adequate base for retraining. For example, this pressure may bring an awareness of learning need to a group of reasonably sophisticated tradesmen and mechanics who have serious doubts about their ability to learn new technical skills at their stage in the life span. Yet learn they must or face the consequences of non-work at an early age. The combination of need to retrain in technical fields and to overcome the inertia of heretofore self-sufficient adults raises many problems for the adult educator.

What are the means by which educators can develop a recognition of the needs to learn on the part of adults facing retraining? When is the most appropriate time to seek a commitment to new learning and to begin retraining? What are the most effective means of giving guidance on goal setting in relation to present ability level and future employability? If the concept of continued learning has not been accepted, how can this be built into the technical training program? What are the social, psychological, and economic barriers to acceptance of retraining and how can they be overcome?

Technical retraining is a priority need today: How can technical retraining be accomplished with the most positive effect on personal goals and achievement and the least disruption of business and industrial development?

12. Technological replacement is a most critical problem for those adults who have the low level of work skill often associated with the common laborer or the sharecropper and who, in addition, lack the more routine qualifications of cultural and educational literacy. The gap between this level of work competency and that for which employment exists cannot often be bridged by simple programs of retraining.

The situations of these people are desperate and the problems they present to the educator are almost as desperate. There can be no retraining in the conventional sense for those who have no base of skill or ability. Education for this group must be focused on acquiring basic literacy. Some need to learn to read and write, to communicate orally with those outside the sphere of the family, to understand the principles of economics and human relationships and, in a real sense, to learn to be a part of the general culture. They are now coming to public attention in growing numbers and, to date, researchers have given little attention to the problems they are raising for society as a whole.

By what means can low literacy level adults be brought into a learning program? Is compulsory adult education effective in job training? What content is most effective in bringing this group to satisfactory levels of economic and political participation?

What positions in business or industry will be open to this group following literacy education? What positions requiring technical skills can be reached through a combined literacy and vocational program? By what means can these adults be identified in advance of unemployment? How can participation in literacy programs be accomplished while this group is still employed? Can social and economic usefulness be taught without academic literacy?

This area is a priority research need: *By what means can the educationally, technically, and culturally illiterate be educated for economic and social self-sufficienc*

The educational program.

13. Without the establishment of overall purposes, the development of a program for continued learning is hazardous. Once purposes are clear, however, program planning (curriculum development) can be undertaken with a degree of confidence. Even so, there are no firm procedures that adult education can use tc accomplish this task.

The process of program planning in adult education has in it many of the same characteristics as curriculum development in schools and colleges, but once again the voluntary nature of adult learning makes for a different set of circumstances. A number of theories of program planning are in use with somewhat different principles of planning suggested as guidelines.

One point of difference among these approaches is a judgment on the extent to which the client should be involved in determining needs and identifying objectives. Research on the effectiveness of different means of program planning, and testing some of the approaches to it, have been underway. The Cooperative Extension Service, in cooperation with rural sociologists, has been the most involved in this research but, as yet, it does not have firm answers to a number of basic questions.

Should program objectives be determined on the basis of individual needs, learning theory or subject matter that fits agency purpose? Should objectives be adjusted to general social needs of the time? What is the most effective way of determining those needs which an individual can resolve through education? What types of client need analysis can be used by community level adult educators?

Which of the alternative approaches to program planning are most effective in achieving selected purposes? Does the method of planning used (formal agency planned vs. informal client and agency planned) make a difference in quality of participation, quantity of participation or actual achievement of behavioral change? Does the amount of client involvement in planning affect learning outcomes? Are suggested principles of sound planning (flexibility, etc.) more or less conducive to learning? Under what conditions? What program planning procedures can be used to encourage self-learning? What procedures discourage participation in educational programs? Which planning procedures work most effectively with which socio-economic classes?

Planning programs for adult learning is an area of needed research now under study, but it needs greater emphasis: What procedures of program planning lead to maximum adult learning?

Administering programs of adult education.

14. Three kinds of administrative concerns are present in adult education programs. One concern is tied to the regular administrative process faced by any organization; the second deals with coordination among the many agencies purporting to meet the educational needs of adults; and the third deals with financing and policy formation of a segment of an organization lying on the margin of acceptance. There may be certain problems of administration unique to adult education in industry and others to CooperativeExtension, but research in general administration tends to apply regardless of the nature of the institution or its method of organization. Of more concern to adult educators are administrative problems related to coordination, use of volunteers, informal action, voluntary financing, and if the adult education role is marginal, developing policies and procedures amenable to this position without losing acceptance in the parent organization.

What kind of structural organization would be most useful as a means of coordinating selected portions of the programs of many agencies? Should this structure be formal or informal? What is the most effective administrative structure for voluntary adult education agencies? To what extent should planning, organizing and administering of adult education activities in a business be tied to the general administration of that business? Likewise in industry, in public schools, in government? Are policies successful in administering adult programs within a parent organization useful in a voluntary educational organization? Are selected means of policy determination equally successful in both? What is the relative effectiveness of advisory committees and councils in helping to establish organizational and administrative policies in each type?

Are established patterns of policy formation in educational agencies serving youth appropriate for those agencies serving adults?

What are the perceived functions and responsibilities of administrative and supervisory personnel in different kinds of adult education agencies? What administrative restructuring is needed to effectively relate to a rapidly changing society?

The variations in administrative structure in adult education lead to an area of research needing solution: What is the proper function of administration in adult education when it is in the mainstream goal of an educational agency; when it is the marginal activity and goal of the agency?

Counselling adults

15. The need for continuous learning has increased many fold in a short time. Pressures to encourage voluntary efforts toward new or additional learning come from many sources, including work changes, community changes and family changes. Left to his own devices, an

adult often will seek help and advice on a very casual basis from his peers, whether or not they are equipped to give such advice. Inquiries do come to adult educators from some of the more sophisticated adults seeking guidance and counsel on plans for learning but, even here, the effectiveness of such aid has not been determined. The potential of adult educators to help adults arrive at decisions about their mobility, retraining or independent study problems is not well-known.

Who are the most likely users of educational guidance and counselling services for adults? With what kinds of educational decisions can adult educators give the most help? What are the outcomes of different kinds of adult guidance programs? What are the characteristics of adults who are amendable to positive aid in a counselling situation? What measuring instruments are useful in collecting information with which to counsel adults? What are the relative values for adult counselling of the instruments developed for high school and college age youth? What new instrumentation is needed? What special materials and information are needed to provide educational guidance to retired adults; to poverty stricken adults; the unemployed; the handicapped? How do social status, social role and nature of the community relate to guidance and counselling effectiveness?

Here is an area of research need that is developing rapidly: What are the means and methods by which educational guidance and counselling can be provided to aid in the resolution of the continuing education challenges of adulthood?

### Preparation of adult educators.

16. The opportunities for graduate study in adult education have been greater than in many fields undergoing rapid expansion. These opportunities generally have developed in relation to programs in schools of education or colleges of agriculuure. These institutional ties have made growth possible with only limited clarification of goals and purposes, curricular organization and kinds of learning experience to be provided. In effect, adult educators have borrowed from or added to vocational and educational programs ad libitum. Those in charge of such graduate programs in adult education now find themselves faced with a multitude of philosphical, policy, content and administration problems. Some of the problems can be resolved by study groups and institutional committees; others need extensive research.

What are the unique characteristics of adult education that should be provided for in planning graduate curricula? What concepts, skills, and values should be (can be) developed in the curriculum? How effective in moving toward the major goals of adult education graduate programs are such devices as the internship, the teaching assistantship, interdisciplinary seminars and independent study? Can the objectives of the program be met more effectively in a curriculum focused on a special type of adult education or on adult education in general? Under what conditions should the graduate program give special attention to increasing competence in content areas outside of the behavioral sciences? How effective have graduate programs been in providing research, content and philosophical leadership for the field?

Here is an area of research need that requires the special attention of the university: What aspects of the graduate curriculum in adult education are most useful for leadership in this emerging field?

Evaluating programs.

17. Although the nature of evaluation is much the same for all types of educational programs, there are some unique characteristics in the emerging field of adult education that demand careful scrutiny and different approaches. The fact of voluntary participation needs to be accounted for in evaluating programs, as well as the practice of using volunteer (amateur) teachers for many phases of the programs.

The wealth of experience that an adult brings to a learning situation is quite removed from that brought to the setting by a child or teenager and needs to be considered when progress toward the objectives of instruction is measured.

The potential for direct financial rewards from continued learning needs to be considered seriously in evaluating most vocational adult education programs. The social objectives of certain adult programs have a more meaningful base and a potential of earlier achievement than do programs for youth. The nation's continued progress in technology has a prime need for higher and higher qualifications among those already employed in both creative and technical fields; evaluation of the effectiveness of programs of continuing education to meet that kind of need is imperative.

Do selected programs of adult education result in increased technical creativity and production? What are the social consequences of selected programs? To what extent do the outcomes of programs change the behavior of adults? What kinds of behavior change occur as a consequence of class participation; selected teaching methods; differing adult learning objectives; differing agency goals; self-designed study activities? What is the relationship among the learning outcomes of programs with identical objectives but held at different locations on a university campus, in a public high school; in an industrial building; in a library? Under what circumstances and for what kinds of objectives, are professional adult educators more productive than volunteer teachers?

What kinds of criteria are most useful in evaluating programs of self-study?

It is important to learn more about the evaluation of voluntary learning programs. The research here has been limited: What individual and/or agency objectives are reached in adult education programs? What approaches to and means of evaluation are useful in measuring outcomes of voluntary and/or forced participation in programs of continued learning?

## The Look Ahead

The organization of areas of research into categories of application should not close the door to theoretical explorations, basic research or speculation. In a field that is very practical on the one hand (vocational retraining programs) and theoretical on the other (development seminars) there is an unusual opportunity for systematic exploration of both the past and the future.

There are theoretical questions at both the edge and heart of adult education that need paring by minds searching for truth. Strategy and policy formation in adult education need examination. Applied researchers often consider behavior as a one-to-one relationship among factors when behavior of adults is too complex for this kind of simplification. The potential that institutions of continued learning have to manipulate educational variables in the broad community setting often is ignored when, indeed, this manipulation may be the most significant element of cultural change.

The applied research needs identified in this document should be pursued with all possible speed but not without a concern for the philosophical and theoretical contemplations and speculation that can help provide a basis for judgment and a guideline for development.

# CHAPTER IV

## SUMMARY

This research and development project is a summary and an integration in which only representative concepts and highlights from the research literature have been presented. Other than to identify the major contributions of this investigation, any further summary would dilute the findings beyond the point of value.

The contributions of this investigation are the gleanings from a series of related efforts that involved (1) reviewing and integrating the relevant recent research in adult education with that cited in previous reviews, (2) reviewing recent research in related disciplines and applied fields, (3) interviewing leading persons in these disciplines and applied fields, (4) carefully reviewing the writings of the professors of adult education, and (5) synthesizing the recommendations emerging from a work conference in which leading adult educators appraised and criticized a preliminary report of needed research.

The two most important contributions of this study are (1) the development of a tenable structure within which research related to adult education can be identified and (2) the identification of the research needs of the field in relation to that structure.

The evidence is clear that the adult education enterprise is an important field of study. There are research problems related to the enterprise that can be resolved by research in a number of disciplines and applied fields. Chief among the disciplines that can made substantial research contributions are sociology and psychology. The applied fields of communications, human relationships, and social work also have important roles they can play in the resolution of other field problems. Furthermore, since the adult education enterprise rests within the total field of education, there are important contributions it can make to adult education.

There will be added contributions from the various disciplines and fields of study as the American society moves closer to the time when continuing education and retraining is the positive alternative to unemployment; to the time when the adult response to questions about his employment will elicit but three alternative responses, (1) "I have a job", (2) "I'm in retraining", and (3)"I'm retired. Within this framework there can be no "unemployment". It is then that the narrow walls of thinking about education must crumble; walls that have tended to confine elementary, secondary, and higher educational systems alike to an image of themselves and their institutional structures as terminal educational facilities--a role assignment adult educators would have them abandon.

## APPENDIX A (1) LIST OF THOSE INTERVIEWED

1. George Barton
2. Robert Beck
3. Kenneth Benne
4. Ed Brice
5. Orville G. Brim
6. Burton Clark
7. Lawrence Cremins
8. Lloyd Davis
9. Glen Dildine
10. Erwin Draheim
11. William J. Fullbright
12. Robert Havighurst
13. Mary Hilton
14. John Holden
15. Eugene Johnson
16. Christen Jonasen
17. Francis Kepple
18. Gordon Lippitt
19. Robert Luke
20. William J. McGlothlin
21. Joseph Matthews
22. Margaret Mead
23. Donald N. Michael
24. Roy Minnis
25. Karl Mundt
26. Larry Rogan
27. Mary Settle
28. Paul Sheats
29. Ralph M. Stogdill
30. Ralph Tyler
31. Sloan Wayland
32. F. J. Weyl
33. Gladys Wiggin
34. Henry Wriston

## APPENDIX A (2) ABBREVIATED LIST OF QUESTIONS

### The First 7 Questions Dealt with the Field Level Adult Educator

1. What do you believe the adult educator's major problems to be?

2. Do you think that most persons from your field (discipline) would agree as to these being the major problems?

3. What discipline or field of study would be most appropriate to help in the resolution of these problems?

4. What kind of priority would you give to the problems we considered?

5. What concerns of your special field (if psychology, sociology, economics, communications, etc.) should the adult educator know about?

6. What is the greatest contribution your discipline (field) is now making to adult education?

7. The check sheet was introduced about like this:

   "On these pages I've listed a sample of questions found in the literature of adult education. In most instances the question (or area of study) is identified by an author as one of basic concern and one which needs attention. We've already talked about some of these listed.
   I'd like you to review this list and rate each question (or area of study) as to how important you believe its resolution is to the development of the field.

### The Last Questions Dealt with the Graduate Program for Adult Education

8. What critical problems need adult educators resolve in developing a graduate curriculum?

9. I'd like to list any generalizations you have about the nature of the curriculum for graduate study in this kind of an applied field. Do you have any?

10. What level of competence should a graduate program in adult education require in a content area at the Master's and Ph.D. level? Example: sociology, physics, economics, agronomy, etc.

11. In the area of process? (Program planning, group methods, teaching techniques, organizational procedures, leadership training, etc.)

12. What is your reaction to fields such as adult education having professtional programs of other than the regular M.S. or Ph.D. degree? (Example: the 6-year certificate is becoming more prevalent in school administration).

13. To what extent should adult education graduate programs be specialized? (Cooperative Extension, library, public school, etc.)

14. Do you believe a positive attitude toward continued learning is sufficiently developed in elementary-secondary-and higher education?

15. Is compulsory adult education justified under certain conditions?

16. Are there any other inspirations that have come to you as we've been talking?

## APPENDIX A (3) INTERVIEWEE CHECK SHEET

### HOW IMPORTANT IS THE RESOLUTION OF THESE QUESTIONS?

Rate on the following scale:

Critical - must be resolved soon.
Needed - its resolution is needed for development.
Related - its resolution is likely to help.
Immaterial - not likely to make any difference.

If you wish to comment rather than respond to certain items, please do so in the space following each item or on the back of the page.

| | Critical | Needed | Related | Immaterial |
|---|---|---|---|---|
| 1. What motivates adults? How do adult education programs modify motivation? | | | | |
| 2. What styles of leadership produce change most efficiently? | | | | |
| 3. What are the learning differentials among culture groups? | | | | |
| 4. How do social values affect participants and learning? | | | | |
| 5. What is the best program planning process? | | | | |
| 6. What agency or organization should be responsible for vocational and technical retraining? | | | | |
| 7. Is there a coherent theory of adult education? | | | | |
| 8. Is adult learning different than the learning by youth? | | | | |
| 9. To what extent should the instructor adjust teaching to the mores of the community? | | | | |
| 10. How do semantic differentials among social groups affect ways of teaching? | | | | |
| 11. What are the best ways of getting adults to "learn on their own"? | | | | |
| 12. How important is an adult teacher's subject matter competency? (English Literature, Soils, Machine Methods, etc.) | | | | |
| 13. How can the attitudes of adults be identified? | | | | |
| 14. What are the best means of diffusing new information to a total community? | | | | |
| 15. What is the relationship between class size, content and teaching techniques? | | | | |
| 16. How do you reach the lower social classes? | | | | |

| | Criti-cal | Needed | Related | Imma-terial |
|---|---|---|---|---|
| 17. Can adult education shape personality? | | | | |
| 18. To what extent should the client be involved in determining objectives? | | | | |
| 19. How can participation in an adult program be maintained? | | | | |
| 20. How should standards of adult teacher competency be measured | | | | |
| 21. What are the learning potentials (cognitive, motor, problem solving) of adults? | | | | |
| 22. How can adult needs be determined? | | | | |
| 23. What is the role of adult education in society? | | | | |
| 24. What are the most effective ways of training volunteer leaders for teaching adults? | | | | |
| 25. To what extent should the clientele's experiential background shape teaching method? | | | | |
| 26. How can the effectiveness of adult education be determined? | | | | |
| 27. How can volunteer leaders be used effectively in teaching? | | | | |
| 28. How can the adult educator distinguish between his clients' needs and wants? | | | | |
| 29. What is adult education's competition for use of non-work time and why is this so? | | | | |
| 30. Is adult education a separate field or a subfield of education? | | | | |

Are there any other questions (areas of study) not listed that you believe must be resolved as soon as or sooner than those you checked as critical?

| | | | | |
|---|---|---|---|---|
| | | | | |
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| | | | | |

# APPENDIX B - CLASSIFICATION SYSTEM FOR RESEARCH LITERATURE

I. ADULT EDUCATION

II. BUSINESS AND INDUSTRY

III. COMMUNICATIONS

IV. PSYCHOLOGY

V. SOCIOLOGY

VI. SOCIAL WORK

VII. VOCATIONAL EDUCATION

VIII. EDUCATION

# I. ADULT EDUCATION

## A. ADMINISTRATION AND ORGANIZATIONS

## B. AGENCIES

1. Co-operative Extension Service
2. Evening College
3. General University Extension
4. International
5. Labor Unions
6. Library and Museums
7. Public School
8. Religious Institutions
9. Residential
10. Voluntary Social Welfare Organizations
11. Other

## C. EDUCATIONAL METHODS

1. Audio-Visual Techniques
2. Group Activities (Workshop, Conferences etc.)
3. Group Instructional Techniques (lectures, discussions etc.)
4. Individual Activity (self-study, counseling, etc.)
5. Programmed Texts and Teaching Machines
6. Other

## D. EDUCATIONAL PROGRAMMING

1. Aims and Objectives
2. Program Evaluation
3. Program Execution
4. Program Planning

## E. SUBJECT MATTER PROGRAM AREAS

1. Agriculture and Rural Education
2. Community Development
3. Consumer Education
4. Fundamental Literacy
5. Health Education
6. Home and Family Life Education
7. Leadership Training
8. Liberal Education
9. Public Affairs and Citizenship
10. Recreation and Leisure
11. Other

## F. GENERAL STUDIES
(Research facilities, Bibliographies, etc.)

G. CONTINUING EDUCATION

1. Women
2. Other

H. ADULT LEARNING

## II. BUSINESS AND INDUSTRY

A. ADMINISTRATION OF EDUCATIONAL PROGRAM

1. Attitudes Toward Education
2. Educational Need Determination
3. Financing
4. Physical Facilities
5. Teacher--Trainer--Instructor--Training
6. Nature of Functions

B. EDUCATIONAL METHOD

1. Group Activities
    a. Different Program types (Conferences, Seminars, Workshops, etc.)
    b. Different Instructional Methods (Lecture, Discussion, Panel, Role-Playing, etc.)
    c. Other
2. Individual Activity
    a. Correspondence
    b. *Self-study*
    c. Other (Counseling, tutoring, apprenticeship, etc.)
3. Group and/or Individual Activities
    a. Audio-Visual
    b. Programmed Texts
    c. Teaching Machines
    d. Other

C. EDUCATIONAL PROGRAMMING

1. Formulation of Objectives
2. Program Planning
3. Program Execution
4. Program Evaluation

D. PERSONNEL PRACTICES (SELECTION OF EMPLOYEES; HIRING PRACTICES, PROMOTION POLICIES.)

E. SOCIO-ECONOMIC FACTORS (TECHNOLOGICAL CHANGE)

## F. TRAINEE CHARACTERISTICS

1. Individual Differences
   a. Educational
   b. Physical (Age, Health, Sex, etc.)
   c. Psychological
   d. Spiritual-moral
   e. Creativity
   f. Productivity
2. Industry Differences
   a. Differences among industries
   b. Differences among companies within a given industry
3. Task differences
   a. Professional
   b. Managerial
   c. Supervisory
   d. Distributive
   e. Secretarial-clerical
   f. Technical
   g. Skilled (including trades)
   h. Semi-skilled
   i. Unskilled

## G. SUBJECT-MATTER EMPHASIS

1. Mathematics
2. Management Principles

## III. COMMUNICATIONS

1. MESSAGE

2. AUDIENCE

3. MEDIA

4. COMMUNICATIONS

5. METHODOLOGY

6. BIBLIOGRAPHIES, ETC.

## IV. PSYCHOLOGY

A. ATTITUDES AND OPINIONS

B. COUNSELING AND GUIDANCE

C. CULTURE AND CULTURAL RELATIONS

D. DEVELOPMENTAL

1. Maturity
2. Older Persons
3. Young Adults

E. EMOTION

F. ENVIRONMENTAL EFFECTS

G. ESTHETICS

H. INDIVIDUAL DIFFERENCES

I. INDUSTRIAL

J. LEADERSHIP

K. LEARNING

1. Cognitive Processes
2. Motor Skills
3. Problem Solving

L. MARRIAGE AND FAMILY RELATIONS

M. MENTAL HEALTH AND REHABILITATION

N. MOTIVATION

O. PERSONALITY

P. SOCIAL STATUS AND STRUCTURE

Q. OTHER

## V. SOCIOLOGY

A. GENERAL STUDIES

B. ANTHROPOLOGY (Social)

C. COMMUNICATIONS (See also Sect. III)
(Diffusion Process and Adoption Process)

D. COMMUNITY STUDIES

1. Rural
2. Suburban
3. Urban
4. Other

E. DEMOGRAPHIC PROBLEMS

1. Manpower
2. Migration
3. Suburban Growth
4. Social Trends
5. Values Attitudes and Opinions

F. ECONOMIC PROBLEMS (Soc. Aspects)

G. GROUP DYNAMICS

1. Leadership
2. *Small groups*
3. Other

H. INDUSTRIAL SOCIOLOGY

I. OCCUPATIONS AND PROFESSIONS

J. SOCIAL GERONTOLOGY AND GERIATRICS

K. SOCIAL INSTITUTIONS

1. Adult Education
2. Education
3. Family
4. Health
5. Religion and Church
6. Other

L. SOCIAL ORGANIZATION

1. Leisure
2. Organizations
3. Participation
4. Citizenship and Public Affairs
5. Social Stratification

## VI. SOCIAL WORK

A. ADMINISTRATION

   1. Agency Cooperation
   2. Methods
   3. Supervision
   4. Worker Training

B. ADULT EDUCATION

   1. Economics of:
   2. Literacy and fundamental education
   3. Self-education
   4. Case work
   5. Other

C. FAMILY

   1. Marriage
   2. Parent Education
   3. Old Age
   4. Other Family Life Problems

D. GROUP WORK

   1. Aged
   2. Community
   3. Families
   4. Other

## VII. VOCATIONAL EDUCATION

A. ADMINISTRATION AND ORGANIZATION

B. AGING (Older Workers)

C. AUTOMATION (Effects of:)

D. EDUCATIONAL METHOD

1. Audio-Visual Techniques
2. Group Activities (Workshop, conferences etc.)
3. Group Instructional Methods (Discussions, demonstrations etc.)
4. Individual Activity(Self-study, correspondence etc.)
5. Teaching Methods (General)
6. Other

E. EDUCATIONAL PROGRAMMING

1. Objectives (Formulation of)
2. Program Planning
3. Program Execution
4. Program Evaluation, Test Evaluation

F. INSTITUTIONAL PROGRAMS

1. Co-operative Extension Service
2. Junior College and University Extension
3. Public School
4. Private Institutions
5. Other, State, Technical Institute, etc.
6. Community
7. Armed Forces

G. PROGRAM AREAS (Curriculum)

1. Agricultural, Fishing and Forestry
2. Clerical
3. Home Economics
4. Professional and Managerial
5. Service (Nursing etc.)
6. Skilled (Technicians etc.)

H. TRAINEE CHARACTERISTICS

I. GENERAL STUDIES
(Research facilities, Bibliographies, etc.)

## VIII. EDUCATION